

92^{No.} 1911

Supreme Court, U.S.
FILED

JUN 1 1993

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IN THE
Supreme Court of the United States

OCTOBER TERM, 1992

PUD No. 1 of JEFFERSON COUNTY

AND THE CITY OF TACOMA,

Petitioners,

v.

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY,

DEPARTMENT OF FISHERIES AND

DEPARTMENT OF WILDLIFE

Petition for a Writ of Certiorari to the
Supreme Court of the State of Washington

PETITION FOR A WRIT OF CERTIORARI

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Tacoma

June 1, 1993

QUESTIONS PRESENTED

1. Whether the State of Washington, Department of Ecology, exceeded its authority under § 401 of the Clean Water Act ("CWA"), by conditioning a water quality certificate for a proposed hydroelectric project subject to the Federal Power Act ("FPA") on instream flows for fish habitat that are concededly in excess of requirements necessary for the protection of water quality?

2. Whether Congress intended § 401 of the CWA to repeal the FPA's reservation to the Federal Energy Regulatory Commission of comprehensive responsibility for determining in the FPA licensing process all relevant fish and wildlife, and other environmental conditions except those contained in state-issued water quality certificates pertaining to the abatement and control of the discharge of pollutants?

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STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY,
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DEPARTMENT OF WILDLIFE

**Petition for a Writ of Certiorari to the
Supreme Court of the State of Washington**

PETITION FOR A WRIT OF CERTIORARI

PUD No. 1 of Jefferson County and the City of Tacoma (hereinafter, jointly, "Tacoma") petition for a writ of certiorari to review the judgment of the Supreme Court of the State of Washington in this case.¹

¹ PUD No. 1 of Jefferson County is a public utility district organized under Wash. Rev. Code ("RCW") 4.04.020. The City of Tacoma operates a municipal electric system under RCW 35.92.050. They are authorized to jointly construct, own and operate electric utility properties by RCW 35.92.280-310.

OPINIONS BELOW

The opinion of the Supreme Court of the State of Washington ("Washington Supreme Court"), No. 58272-6 filed April 1, 1993 (App. 3a), is reported at 121 Wash. 2d 179. The "Findings of Fact, Conclusions of Law and Final Judgment" of the Superior Court of the State of Washington in and for the County of Thurston ("Superior Court") were filed on August 14, 1991 (App. 29a). The Superior Court's Memorandum Opinion was filed May 8, 1991 (App. 37a). The "Revised Final Findings of Fact, Conclusions of Law and Order" of the State of Washington Pollution Control Hearings Board ("PCHB" or "Board") were issued January 25, 1989 (App. 46a). The PCHB's "Order Granting Cross Motion For Summary Judgment" was issued April 10, 1987 (App. 74a) and its "Order Denying Second Motion for Summary Judgment" was issued December 9, 1987 (App. 70a). The letter order of the State of Washington Department of Ecology granting request for water quality certification was issued June 11, 1986 (App. 82a). The decisions of the Superior Court, the PCHB and the Department of Ecology are unreported.

JURISDICTION

The opinion of the Supreme Court of Washington filed on April 1, 1993 (App. 3a) became the decision terminating review in that court, and therefore its judgment, on April 21, 1993 (App. 1a). The jurisdiction of this Court is invoked under 28 U.S.C. 1257.

STATUTES INVOLVED

Sections 301, 302, 303, 306, 307, 401 and 510 of the Clean Water Act, also known as the Federal Water Pollution Control Act, 33 U.S.C. 1311, 1312, 1313, 1316, 1317, 1341 and 1370; and 4(e), 10(a)(1), 10(j) and 15(a)(2)-(3) of the Federal Power Act, 16 U.S.C.

797(e), 803(a)(1), 803(j) and 808(a)(2)-(3) are reproduced at App. 86a-146a.

STATEMENT

This case involves a water quality certificate issued by the State of Washington, Department of Ecology under § 401 of the Clean Water Act, for Tacoma's proposed Elkhorn Hydroelectric Project on the Dosewallips River in the State of Washington. The certificate prescribes minimum streamflow quantities to be maintained for fish habitat purposes. The Washington Supreme Court rejected Tacoma's contention that minimum streamflows for fish habitat must be determined under the comprehensive balancing process in Part I of the Federal Power Act, not by state-imposed conditions under § 401 of the CWA.²

A. Statutory and Regulatory Background

1. The Federal Power Act

Under the FPA, FERC has exclusive authority to issue licenses for the vast majority of new and existing hydroelectric projects. FPA §§ 4(e), 23(b), 16 U.S.C. 797(e), 817 (1988). This authority includes original licenses of the kind sought by Tacoma, and license renewals, known as "new licenses," which must be obtained when an original license term expires. FPA § 15, 16 U.S.C. 808 (1988).³

² A case presenting substantially similar issues is now pending on petition for a writ of certiorari to the Supreme Court of Vermont. *Simpson Paper (Vermont) Co. v. Department of Env'tl. Control*, No. 92-1012, order inviting the views of the United States issued March 8, 1993.

³ Between 1991 and the year 2000, FERC anticipates the relicensing of about 320 hydropower projects, or fully 17 percent of the facilities currently under its jurisdiction. Federal Energy Regulatory Commission, *Hydroelectric Project Relicensing Handbook 1* (April 1990); *Hydropower Disputes: A Battle of the*

The FPA requires that projects licensed by FERC be "best adapted to a comprehensive plan" for improving or developing the waterway, taking into account such potentially competing factors as the need for the project's power, energy conservation, navigation, irrigation, flood control, water supply, fish and wildlife protection, recreational opportunities, and other aspects of environmental quality. FPA §§ 4(e), 10(a)(1), 16 U.S.C. 797(e), 803(a)(1) (1988).

Congress' intent in enacting the Federal Water Power Act of 1920, the FPA's predecessor statute, was "to secure a comprehensive development of national resources". *First Iowa Hydro-Elec. Coop. v. FPC*, 328 U.S. 152, 181 (1946). The Court has observed that the key to that rational development is centralization of licensing authority in one federal administrative body which would exercise a consistent and comprehensive planning role. *Id.* at 164, 182. Absent an express and exceptional delegation to the States of authority to impose requirements on this process, FERC's pervasive jurisdiction over the licensing of hydroelectric projects is exclusive. *FPC v. Oregon*, 349 U.S. 435, 446 (1955).⁴ These principles recently were reconfirmed in *California v. FERC*, 495 U.S. 490, 110 S. Ct. 2024 (1990).

Endangered Salmon, Cogeneration & Resource Recovery, May/June 1991, at 22, 24 ("More than half of these licenses will expire in 1993."). Between 1990 and 1993 alone, the licenses for nearly 200 hydropower plants are due to expire, representing over 2,200 MW of electric generating capacity. Electric Power Research Institute, *Lessons Learned in Hydro Relicensing (1984-1989): Trends, Costs, and Recommendations* 2-1 (May 1991); Richard T. Hunt & Judith Mohsberg, *Relicensing Entanglements*, Independent Energy, January 1991, at 48. Most of these are the subject of applications now pending at FERC. *Special Supplement 1992 Edition*, Hydrowire, §§ 7-9, August 1992.

⁴ The state water quality certificate authority defined in § 401 of the CWA is an example of such a delegation.

Before issuing a license under the FPA, FERC must weigh potential environmental impacts of a proposed project—or, in the case of a license renewal, impacts of continued operation. FERC assesses potential impacts on water quality, fish, wildlife and botanical resources, historic and archeological resources, recreational resources, land management, and aesthetics.⁵ Under § 10(j) of the FPA, 16 U.S.C. 803(j), FERC must include in licenses conditions for the protection and enhancement of fish and wildlife, and must adopt conditions recommended by federal and state fish and wildlife agencies, unless it expressly finds those recommendations to be inconsistent with the purposes and requirements of the FPA or other provisions of applicable law.

2. The Clean Water Act

a. *The § 401 Certification Requirement.* Section 401 (a)(1) of the CWA, 33 U.S.C. 1341(a)(1) (1988), requires an applicant for a federal license or permit for any activity which may result in a discharge into navigable waters of the United States to obtain a certification (or waiver thereof) from the state in which the discharge originates. The state must certify that the discharge will comply with applicable sections of the CWA specifically enumerated in § 401(a). Each of the enumerated sections addresses discharges of pollutants. Section 301 concerns effluent limitations; it makes unlawful the discharge of any pollutant except in compliance with specified provisions of the CWA. Section 301(b)(1)(C) requires, *inter alia*, achievement of limitations established under federal law, including CWA water quality standards, and limitations established under state law no less stringent than federal requirements (as authorized by § 510). Section 302 sets standards for effluent limitations. Section

⁵ 18 C.F.R. 380.1-380.14 (1992). The types of information FERC must consider are set forth in FERC's regulations establishing requirements for license applications. 18 C.F.R. Parts 4, 16. See 18 C.F.R. 380.3(c)(1).

303 governs state water quality standards and implementation plans. Section 306 prescribes national standards of performance for the control of discharges. Section 307 sets effluent pretreatment standards and prohibits the discharge of certain effluents.

Section 401(d) of the CWA, 33 U.S.C. 1341(d) (1988), authorizes states to condition water quality certificates issued pursuant to § 401(a)(1) on specified water quality factors. It directs that state certifications shall impose limitations and monitoring requirements necessary to ensure compliance with:

any applicable effluent limitations and other limitations, under section [301] or [302] of this title, standard of performance under section [306] of this title, or prohibition, effluent standard, or pretreatment standard under section [307] of this title, and with any other appropriate requirement of State law set forth in such certification. . . .

By operation of § 301(b)(1)(C), water quality standards under CWA § 303 are incorporated into § 401(d). Any limitations and conditions included by the state in the certificate, including those based on other state requirements appropriate to § 401, then become conditions on the FERC license or other federal permit for the activity. FERC has ruled that it has no authority to reject or revise conditions in a state water quality certification, even if such conditions are outside the scope of § 401, because only the state courts may review such certifications.⁶

b. The EPA's Role in Establishing Water Quality Standards for § 401 Certifications. Section 401(a) ex-

⁶ *Town of Summersville*, 60 FERC ¶ 61,291 at 61,990 (1992), reh'g denied, 63 FERC ¶ 61,037 (1993); *Carex Hydro*, 52 FERC ¶ 61,216 at 61,770-771 (1990); *Central Maine Power Co.*, 52 FERC ¶ 61,033 at 61,172 (1990).

pressly includes § 303.⁷ Section 303 requires a state to establish water quality standards to be approved by the United States Environmental Protection Agency ("EPA").

Under EPA regulations, state water quality standards have as their purpose "to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. . . .," which include water quality for the protection and propagation of fish. 40 CFR 131.2 (1992). Pursuant to CWA § 303(c)(2)(A), 33 U.S.C. 1313(c)(2)(A), the regulations provide that "[a] water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses." 40 CFR 131.2 (1992). Section 303(c)(2)(A) and the regulation result in a two-step format for state water quality standards. The first step requires the state to designate the uses desired for a particular body of water. The second step involves establishment of "criteria"—objective, scientifically ascertainable standards—the implementation of which should ensure attainment of water quality sufficient to achieve and protect the designated uses.

The first-step regulation, 40 CFR 131.6(a) (1992), directs a state to submit for EPA approval water quality standards which establish "use designations" pursuant to CWA § 303(c)(2). The second-step regulation, 40 CFR 131.6(c) (1992), directs that the state's standards must include "[w]ater quality criteria sufficient to protect the designated uses." The criteria are defined as "elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally pro-

⁷ Section 401(d) does not enumerate § 303, but includes it because § 401(d) requires compliance with § 301, which in turn incorporates water quality standards under the CWA through the provisions of § 301(b)(1)(C).

tect the designated use." 40 CFR 131.3(b) (1992). These criteria must be supported by information sufficient to ensure the "adequacy of the scientific basis of the standards." 40 CFR 131.6(f) (1992).

c. *Washington's Requirements Concerning Water Quality Standards and Streamflows.* The Department of Ecology administers the State of Washington's programs under the federal CWA, and decides whether to grant, grant with conditions or deny § 401 certifications. RCW 90.48.260 (Supp. 1992). In accordance with CWA § 303 and RCW 90.48.260, the Department has established "water quality standards for surface waters for the State of Washington". WAC Ch. 173-201.*

The standards comply with EPA's requirements concerning the scope and structure of state water quality standards under § 303. They classify Washington's waters into use and criteria classes. WAC 173-201-045. Class AA waters are deemed to be "extraordinary" because they "markedly and uniformly exceed the requirements for all or substantially all uses," including, but not limited to, "fish migration, rearing, spawning and harvesting". WAC 173-201-045(1)(a) and (b)(iii).

The Dosewallips River is an unappropriated perennial stream with populations of steelhead trout, and coho and chinook salmon (App. 4a, 31a, 48a). It and its tributaries are classified as Class AA. WAC 173-201-080 (32). Class AA waters are also subject to specific water quality *criteria* which define values for ascertainable factors such as fecal coliform organisms, dissolved oxygen, dissolved gas, temperature, pH, turbidity, and toxic, radioactive or deleterious material. *Id.*; WAC 173-201-045 (1)(c).

By separate statute, Washington also requires that perennial streams "shall be retained with base flows nec-

* The Washington Administrative Code ("WAC") is a compilation of administrative regulations.

essary to provide for preservation of wildlife, fish, scenic, and aesthetic and other environmental values, and navigational values." RCW 90.54.020(3)(a).

B. The Elkhorn Hydroelectric Project

The Elkhorn Hydroelectric Project is a new facility which the City of Tacoma proposes to construct on the Dosewallips. It would operate in a run-of-river mode, *i.e.*, it would divert, but not impound water (App. 4a, 31a, 75a). The project would consist of a low (10-foot) diversion weir in the river, a 9-foot diameter tunnel running 1.2 miles downstream and a powerhouse containing two hydro-powered generating units rated at 8.9 MW and 4.4 MW at a head of 295 feet. The project would divert some 50 to 600 cubic feet per second ("cfs") from the river flow, depending on seasonal flows. 52 Fed. Reg. 23342 (June 19, 1987).

The area between the diversion portal and the project's tailrace (where diverted waters return to the river) is known as the bypass reach. This reach would be located in a canyon. Several fish species populate the reach. The river's flows down the five percent gradient of the proposed reach are fed by snowmelt and glacial runoff that turn the reach segment into a torrent of cascading water, except during low flow periods in August, September and October (App. 61a).

On March 18, 1986, Tacoma applied to the FERC for an original major project license. Notice of the application was published on June 19, 1987. 52 Fed. Reg. 23340, 23342. As part of the federal application process, Tacoma consulted with the Washington Departments of Ecology, Fisheries and Wildlife, the interested federal agencies (U.S. Fish and Wildlife Service and the National Marine Fisheries Service), and an Indian tribal organization, the Point No Point Treaty Council. 18 C.F.R. 4.38 (a). Processing of Tacoma's application at the FERC has been delayed pending final resolution of the disputed

streamflow conditions in the state § 401 certificate at issue.

C. Proceedings Below

1. Administrative Action

In preparing to file its license application with FERC, Tacoma considered water quantity issues affecting fish habitat in the by-pass reach. Tacoma accepted the recommendation of the agencies and tribes that it undertake an instream flow study using the Instream Flow Incremental Method (IFIM).⁹ On the basis of the study, Tacoma proposed base flows ranging between 65 and 155 cfs. The interested state and federal agencies and tribes recommended minimum flows between 100 and 200 cfs, depending on the month (App. 5a). Tacoma also applied to the state for a § 401 certificate. The Department of Ecology granted Tacoma's water quality certification request by a letter order dated June 11, 1986 (App. 82a). It imposed the flow quantities recommended by the agencies and tribes, although it expressly ruled that such quantities were not required to maintain water quality in the bypass reach.¹⁰ It explained:

While these flows are in excess of those required to maintain water quality in the bypass region, they are the flows recommend [sic] by the resource agencies and tribes for maintaining sufficient flows for the fishery resource. They are included herein as a matter of cooperation with these other agencies (App. 83a-84a).

⁹ IFIM uses a computer modeling study "to determine 'weighted usable area' in a given length of river when flows are varied. The weighted usable area is an indicator of fish habitat and hence fish production" (App. 49a).

¹⁰ A Washington statute, RCW 90.22.010 (Supp. 1992), requires the Department of Ecology to establish flows to protect fish and wildlife when requested to do so by the State departments of fish or wildlife, or when it determines that such flows are necessary to preserve water quality. It is not an EPA-approved water quality standard.

In addition, the certification imposed discharge conditions specifically related to construction of the project, and a requirement that Tacoma obtain a state water right permit prior to commencing construction (App. 84a).

Tacoma appealed the letter order to the PCHB. It moved the Board to grant it summary judgment on the ground that the base flow quantities were not justified by water quality *standards* or effluent limitations under the Clean Water Act. The Department of Ecology did not take issue with this (App. 77a). The Board concluded that the flow quantities were "not supported by, nor intended to be supported by, water quality *standards*" (App. 78a). It ruled, however, "that a Section 401 water quality certificate may include limitations to enforce all water quality—related statutes and rules including, but not limited to, water quality standards." (App. 79a). The Board subsequently denied Tacoma's second motion for summary judgment, which contended that the state-imposed flow quantities were preempted by the FPA (App. 70a).¹¹

The Board then conducted an evidentiary hearing. It concluded that the Department of Ecology's streamflow quantities were intended to be the optimum flows for the purpose of enhancing the fishery, and that such flows did not satisfy provisions of state law requiring a balancing of competing beneficial uses (App. 70a). It vacated the § 401 certificate and remanded with directions that a new certificate be issued containing Tacoma's recommended base flow quantities.

2. Judicial Proceedings

a. *Superior Court.* The State of Washington Departments of Ecology, Fisheries and Wildlife petitioned the Superior Court for review of the PCHB ruling. In a

¹¹ Tacoma cited *Rock Creek Ltd. Partnership*, 38 FERC ¶ 61,240, rehearing denied, 41 FERC ¶ 61,198 (1987), affirmed, *California v. FERC*, 877 F.2d 743 (9th Cir. 1989) affirmed, 495 U.S. 490, 110 S.Ct. 2024 (1990).

May 8, 1991 memorandum opinion, the court held that because FERC had made no determination as to the appropriate instream flow, *California v. FERC* (*supra* n.11) was inapplicable (App. 37a). The court then entered formal Findings of Fact, Conclusions of Law and Final Judgment (App. 29a). It affirmed the PCHB's decision that the minimum flow condition required by the Department of Ecology was not preempted by federal law, reversed the Board's ruling that the Department's minimum flow regime was an enhancement under state law, and reversed the Board's conclusion that state law does not permit an enhancement flow condition in the circumstances (App. 35a).

b. *Washington Supreme Court*. The Supreme Court of Washington granted Tacoma's motion for direct review and affirmed the Superior Court's judgment. (App. 5a, 28a). It held that the streamflow conditions in the § 401 certificate were necessary to assure compliance with the State's water quality standards because those standards prohibit degradation of the state's waters and particularly degradation of fish habitat and spawning in the Class AA Dosewallips (App. 7a-8a). Citing the definition of pollution in the CWA,¹² the court also held that "man-induced alteration of streamflow level is 'pollution'" (App. 8a).¹³ Finally, the court rejected Tacoma's contention "that water quality standards are limited to pollution and discharges, as opposed to streamflow levels" (App. 9a). It invoked precedents from other states holding that designated uses, including fish habitat, are an integral part of water quality standards (App. 8a-10a).

¹² "The term 'pollution' means the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water." 33 U.S.C. 1362(19).

¹³ The court cited a letter written to the FERC by an assistant administrator of the EPA to the effect that "[p]rotection of water quality involves far more than just addressing chemistry . . . relevant water quality issues include the diversity and compensation of the aquatic species . . . [and] habitat loss. . . ." (App. 8a).

In addition, the court held that application of RCW 90.54.020(3)(a) (Supp. 1992), requiring retention of base flows in perennial streams necessary to preserve fish and wildlife, was authorized by CWA § 401(d)'s provision permitting states to condition water quality certificates on "any other appropriate requirement of State law" (App. 10a-14a). The court rejected Tacoma's contention that this phrase refers only to water quality standards. The court observed that § 401(d) expressly lists §§ 301, 302, 306 and 307 of the CWA as sources for the limitations in § 401 certificates, but that § 303 relating to water quality standards, is not expressly listed. It then concluded that Congress must have intended the phrase "any other appropriate requirement of State law" to refer broadly to all state water quality-related laws, not just to § 303 state water quality standards (App. 13a).

The court also rejected Tacoma's contention that the FPA preempted the streamflow conditions in the § 401 certificate (App. 14a-22a). Finally, it held that the Department of Ecology's instream flows were not an enhancement of the fishery in the Dosewallips (App. 22a-27a).

REASONS FOR GRANTING THE PETITION

I. THIS COURT SHOULD RESOLVE THE IMPORTANT FEDERAL QUESTION CONCERNING THE SCOPE OF A STATE'S CERTIFICATION AUTHORITY UNDER § 401 OF THE CLEAN WATER ACT

This case involves another attempt by a state to extend the carefully defined water quality certification authority delegated to the states by § 401 of the CWA. The certificate imposes stream flow quantities on operation of a hydroelectric project that is subject to comprehensive licensing and oversight by the FERC.

The flow quantities required by Washington were conceded to be "in excess of those required to maintain water quality in the bypass region" (App. 83a).

They were imposed as a matter of cooperation with state resource agencies and Indian tribes which had recommended maintenance of such flow for the fishery resource in the project's bypass reach (App. 84a).

Under § 401(d), a state water quality certification becomes a condition to any original or renewed hydroelectric license (as well as to other federal licenses or permits).¹⁴ Neither FERC nor the federal courts have authority to review the certification's requirements, even if they exceed the scope of the state's delegated authority under § 401.¹⁵ The only remedy lies in the state courts and ultimately this Court. The state courts are in conflict concerning the scope of § 401.

The FERC has recognized that "[i]t is possible for a state certifying agency to, in effect, veto a project by denying a section 401 certification request and, if challenged, have that decision sustained by state courts."¹⁶ It has also asserted that it does not "believe that a state should be permitted to use its water quality certification authority to impose conditions that are unrelated to water quality and that conflict with the Commission's licensing decisions."¹⁷ Because "review of the appropriateness of water quality certification conditions is the purview of state courts,"¹⁸ review by this Court is peti-

¹⁴ Section 401 certificates must be obtained not only for hydro-power licenses, but all other federally authorized activity whose construction or operation may result in the discharge of pollutants, e.g., gas pipelines licensed under § 7 of the Natural Gas Act, 15 U.S.C. 717, that cross rivers and wetlands; and water supply projects requiring dredge and fill permits under § 404 of the CWA.

¹⁵ See n.6 *supra*; see also e.g., *Roosevelt Campobello Int'l. Park Comm'n. v. EPA*, 684 F.2d 1041, 1056 (1st Cir. 1982); *Keating v. FERC*, 927 F.2d 616, 622 (D.C. Cir. 1991); *United States v. Marathon Dev. Corp.*, 867 F.2d 96, 102 (1st Cir. 1989); *Proffitt v. Rohm & Haas*, 850 F.2d 1007, 1009 (3rd Cir. 1988).

¹⁶ *Central Maine Power Co.*, 52 FERC ¶ 61,033 at 61,172 (1990).

¹⁷ *Id.* at 61,173.

¹⁸ *Id.* at 61,172.

tioners' only remedy. As Tacoma asserted below, the minimum flows prescribed in this case reduce the economics of the project to infeasible levels (PCHB Tr. December 17, 1987 p. 72-73), and thus veto the project as effectively as an outright denial of the certificate.

The Washington Supreme Court concluded that "man-induced alteration of streamflow level is 'pollution'" under the CWA (App. 8a), and that state law and state water quality standards under the CWA require the prescribed streamflows in order to prevent degradation of fish habitat and spawning in the Dosewallips (App. 7a-8a). These holdings are not within the scope of § 401. They are contradicted by the plain language and history of that provision, which limits states to assuring that discharges into navigable waters will comply with requirements for the abatement and control of pollutants in such discharges.

Moreover, the ruling fails to harmonize CWA § 401 with the FPA's carefully balanced scheme for federal licensing of hydroelectric projects. It erroneously ascribes to Congress an intent to substitute state conditioning authority for FERC's comprehensive planning and licensing responsibilities. Under the court's reasoning, § 401(d) grants the 50 states virtually unlimited authority to restrict the operation of hydroelectric projects based on any state requirement related to uses of a navigable waterway. Congress, however, confined states' certificate authority to water quality standards and other limitations regulating the discharge of pollutants expressly enumerated in § 401. Section 401 conditions based on other state requirements must be appropriate to these standards and limitations. Congress did not intend § 401 to undo the basic scheme of the FPA by authorizing unrestrained intervention by the states into the licensing process. See FPA § 10(j), 16 U.S.C. 803(j); cf. *California v. FERC*, 495 U.S. 490, 110 S.Ct. 2024 (1990), *First Iowa Hydro-Elec. Coop. v. FPC*, 328 U.S. 152 (1946).

If Washington and other states are permitted to extend their § 401 authority beyond its intended limits, the economic and environmental consequences will be widespread and serious. An unnecessary, duplicative and expensive layer of State hydropower regulation will be superimposed on an already complex federal licensing scheme. Burdensome operating restrictions will prevent construction of proposed hydroelectric facilities like the Elkhorn Project and reduce capacity or force the shut-down of numerous existing projects.¹⁹ In addition, clean, renewable hydropower lost through misuse of § 401 will have to be replaced by other sources. In the Pacific Northwest, and in most other areas of the country, this will likely be power from air-polluting fossil fuel sources.

Washington is not alone. Other states have attempted to use the § 401 certification process to encroach on FERC's licensing jurisdiction. The Supreme Court of Vermont recently upheld a § 401 condition requiring spillage flows over a dam in order to render the dam site aesthetically pleasing.²⁰ In recent licensing proceedings, the FERC has noted numerous conditions in state water quality certifications which are unrelated to water quality and which pose actual or potential conflicts with the Commission's license. These have included, for example: subjecting project operations to state approval;²¹ requiring that a portion of project revenues be deposited in a special account for fish and wildlife enhancement and

¹⁹ There are almost 200 hydroelectric projects now in the FERC relicensing process, including at least 5 in Washington alone, as well as scores of others that must be relicensed in this decade. *Special Supplement 1992 Edition*, Hydrowire §§ 7-9, August 1992.

²⁰ *Georgia Pacific Corp. and Simpson Paper (Vermont) Co. Inc.*, Vt. Sup. Ct. No. 91-530, September 14, 1992, petition for a writ of certiorari pending, *Simpson Paper (Vermont) Co. v. Department of Env'tl. Control*, No. 92-1012, order inviting the views of the United States issued March 8, 1993.

²¹ *Central Maine Power Co.*, 52 FERC ¶ 61,033 at 61,172 (1990).

water quality management;²² and ordering the project owner to build angler's access paths and low-water stepping stone bridges that raise serious safety concerns.²³

The several state courts which have considered the scope of § 401 are divided. Courts in Connecticut, New York and Pennsylvania have properly interpreted § 401 to preclude denial of certification or imposition of conditions for reasons other than protection of water quality from polluting discharges.²⁴ The Washington Supreme Court and Supreme Court of Vermont have ruled to the contrary.²⁵

This Court should settle the important federal question presented by the need to harmonize § 401 of the CWA and Part I of the FPA. If the issue is not resolved now, other states will join Washington, Vermont, Maine,²⁶

²² *Carex Hydro*, 52 FERC ¶ 61,216 at 61,768 (1990).

²³ *Town of Summersville*, 60 FERC ¶ 61,291 at 61,990-91 (1992), reh'g denied, 63 FERC ¶ 61,037 (1993).

²⁴ *Summit Hydropower v. Commissioner of Env'tl. Protection*, CV91-050-26-43, 1992 Conn. Super. LEXIS 2177, 1992 WL 175241 (Conn. Super. July 20, 1992) (minimum spill requirement based on subjective aesthetic impact beyond the scope of state agency's § 401 authority), appeals pending Supreme Court of Connecticut Nos. SC14618 and 14619, argued May 4, 1993; *Pennsylvania Dept. of Env'tl. Resources v. City of Harrisburg*, 578 A.2d 563 (Pa. 1990) (state water quality agency exceeded its authority under § 401 by examining the impact of physical changes in the river on aquatic resources resulting from construction of a hydroelectric project and the project's effect on wetlands and fish migration); *Niagara Mohawk Power Corp. v. New York Dept. of Env. Cons.*, 187 A.D. 2d 7, 592 N.Y.S.2d 141 (NY App. Div. 1993), motion for leave to appeal granted, NY Ct. App. May 11, 1993; *In re Power Auth. v. Williams*, 457 N.E. 2d 726 (N.Y. 1983) (state certificating agency limited to determining whether hydroelectric project would meet applicable water quality standards, and was not empowered to base its decision on a balancing of need for the project against adverse environmental impacts under state energy law and master plan); see also *deRham v. Diamond*, 295 N.E.2d 763 (N.Y. 1973) (New York's high court interpreting § 401's predecessor provision).

²⁵ See *supra* n.20.

²⁶ See *supra* nn.21-22.

West Virginia²⁷ and others in using the CWA § 401 process to encroach on FERC's licensing authority during this critical decade, when hundreds of the nation's project licenses must be considered for renewal. To postpone resolution of the problem while non-water quality conditions are tested in numerous state courts can only reduce the economic use and environmental benefits of hydroelectric power. A uniform interpretation of § 401 is essential to achieve the water quality purposes of the state certification requirement, without undermining FERC's central responsibility under the FPA to evaluate and balance all aspects of a project prior to licensing or relicensing.

II. STREAMFLOW QUANTITIES FOR FISH HABITAT ARE NOT AUTHORIZED UNDER § 401 WATER QUALITY STANDARDS

The Washington Supreme Court was mistaken in holding that because a *goal* of the state's water quality standards as approved by EPA includes the protection of fish, any man-induced changes in a river's quantity of flow that impacts fish habitat may violate water quality standards under the CWA. (App. 8a). This ruling reflects a fundamental misunderstanding of the federal-state relationship created by § 303 of the CWA (33 U.S.C. 1313 (1988)) and implemented in federally-approved state water quality standards mandated by the CWA.

A state water quality standard ("WQS") must under CWA § 303(c)(2)(A) "consist of the designated *uses* of the navigable waters involved *and* the water quality *criteria* for such waters based upon such uses" (emphasis added). Propagation of fish and wildlife is an element to be taken into account in such standards, because it is among "designated uses". *Id.* EPA's regulations governing approval of state WQS under CWA § 303 impose a three-part framework on state standards: designation of

²⁷ See *supra* n.23.

uses (40 CFR 131.2, 131.6(a), 131.10 (1992)); protection of each designated use through adoption of one or more criteria (40 CFR 131.2, 131.3(b), 131.6(c), 131.11(a) (1992)); and prevention of degradation of existing water levels. Management goals, such as the promotion of fish and wildlife "values" and "uses" are to be achieved through implementation of specific, quantifiable "criteria." See 40 CFR 131.2, 131.5, 131.6, 131.10, 131.11. These criteria provide objective standards for abating and controlling the discharge of pollutants.

The management goals are not themselves enforceable water quality requirements, but rather are expressions of the ends to be promoted by specific water quality criteria. Thus, while "uses" are part of a state's WQS, including uses for aesthetics, fish and wildlife protection, and recreation, such uses must be promoted under the CWA through specific state water quality criteria for the control of pollutant discharges.

The Supreme Court of Washington erroneously obliterates § 303(c)(2)(A)'s careful distinction between "designated uses" and "criteria." The criteria are the operative water quality factors dischargers must satisfy to achieve the state's designated uses. 40 C.F.R. 131.2, 131.6(c). This distinction is patent on the face of the water quality certificate issued in this case, for the certificate concedes that the streamflow requirements imposed are in excess of levels needed to preserve water quality, and that they are intended to satisfy the fish protection goals of the various resource agencies and tribes (App. 83a-84a).

The purpose of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. 1251 (1988). As the terms "chemical, physical and biological" imply, that purpose is to be achieved by the abatement and control of scientifically ascertainable pollutants found in discharges into navigable waters. *Id.*²⁸ The Washington

²⁸ See *EPA v. California*, 426 U.S. 200, 202-208 (1976).

Supreme Court's holding that any man-made alteration of stream-flow is pollution, and that a state requirement may be included in a § 401 certificate so long as it is related to the use of water, is contrary to § 401's limitation to discharges of pollutants and state requirements appropriate to control of such discharges. Alteration of streamflows—in this case, diversion of water for later return unchanged some 1.2 miles downstream—is not a discharge of a pollutant. Sections 502(16) and (12) of the CWA expressly define and limit the term “discharge” to the addition of any pollutant to navigable waters from a point source.²⁹

These definitions also restrict state conditioning authority under § 401(d) to the imposition of requirements necessary to ensure that the project's discharge complies with requirements for the abatement and control of pollutants. Under § 401(a)(1), “[a]ny applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters,” must obtain from the State in which the discharge will originate a certificate “that any such discharge will comply with the applicable provisions of sections [301, 302, 303, 306 and 307 of this Act]”. 33 U.S.C. 1341(a)(1). Each of the referenced sections in § 401(a) also pertains to the abatement or control of the discharge of pollutants.³⁰ Nor does the term “pol-

²⁹ Section 502(16) and (12) of the CWA, 33 U.S.C. 1362(16) and (12) provide respectively: “[t]he term ‘discharge’ when used without qualification includes a discharge of a pollutant, and a discharge of pollutants”; [t]he term “discharge of a pollutant” and the term “discharge of pollutants” means (A) any addition of any pollutant to navigable waters from any point source. . . .”

³⁰ Sections 301 and 302 set standards for effluent limitations. Section 303 governs State water quality standards and implementation plans. Section 306 sets national standards of performance for the control of discharges. Section 307 sets effluent pretreatment standards and prohibits the discharge of certain effluents.

lutant” include alteration of stream flow—it refers only to substances artificially added to water and changes in its temperature.³¹ CWA § 502(6), 33 U.S.C. 1362(6). Thus, under the plain meaning of § 401, the requirements in a water quality certification pertain to compliance with applicable standards governing a *discharge* of a pollutant or pollutants.

Examples of such requirements are found in Tacoma's § 401 certificate itself, which sets forth a number of conditions to prevent specified pollutants from entering the water during construction activity, *e.g.* petroleum products, paint, chemicals such as creosote, dredge spoils, leachates and sanitary waste. (App. 84a).

The Supreme Court of Washington's conflation of “criteria” and “designated uses” led it to conclude that fish protection goals under its water quality standards (WAC 173-201-010) are “appropriate requirement[s]” of State law under § 401(d) that support streamflow conditions in the state's § 401 certificates. But such goals, even though appropriate under § 303, are not the operative criteria regulating discharges to which § 401(d) applies. The regulation of streamflow for fish protection at a hydroelectric facility is reserved to the federal licensing process.

As the Appellate Division of the New York Supreme Court recently ruled, environmental requirements not directly related to water quality, *i.e.*, beyond narrative and numerical criteria required by EPA, are reserved by the FPA for determination at the federal level—dam safety, general balancing of economic and other concerns,

³¹ Section 502(6), 33 U.S.C. 1362(6) provides:

(6) The term “pollutant” means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

the effect on wildlife, recreational opportunities and the like. *Niagara Mohawk Power Corp. v. New York State Dept. of Env't'l. Conservation*, 187 A.D. 2d 7, (N.Y. App. Div. 1993), motion for leave to appeal granted, NY Ct. of App. May 11, 1993.

The Washington Supreme Court's citation of a letter to the FERC from an Assistant EPA Administrator provides no support for its ruling. The letter simply describes EPA's position that "[p]rotection of water quality involves far more than just addressing water chemistry" (App. 8a). It does not support the court's holding that because designated uses and the prevention of the degradation of water quality are part of a state's water quality standards under § 401, they automatically displace FERC's comprehensive authority under the FPA.³²

III. SECTION 401(d)'s PROVISION FOR CONDITIONING WATER QUALITY CERTIFICATES ON "ANY OTHER APPROPRIATE REQUIREMENT OF STATE LAW" AUTHORIZES ONLY STREAMFLOW CONDITIONS APPROPRIATE TO THE WATER QUALITY LIMITATIONS AND STANDARDS ENUMERATED IN § 401

Independently of its reliance on the state's water quality standards, the Washington Supreme Court erroneously concluded that § 401(d)'s grant of authority to the states to condition water quality certificates on "any other appropriate requirement of state law" authorizes streamflow conditions based on RCW 90.54.020(3)(a) (Supp. 1992). That statute provides that "[p]erennial rivers and

³² The court also mistakenly relied on *Bangor Hydro-Electric Co. v. Board of Env't'l. Protection*, 595 A.2d 438 (Me. 1991). That case held that a state certifying agency may require an applicant for a § 401 certificate to produce information relating to the state's designated uses. The Maine Supreme Court carefully ruled, however, that "[w]e need not decide in this appeal to what extent the Board may condition water quality certification upon measures designed to promote the future attainment of designated uses", because that issue was not before the court. 595 A.2d at 443.

streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values."

The court based its holding on its construction of the term "appropriate" in § 401(d), which it construed as having a breadth equivalent to the CWA's purpose, as stated in the Act's Declaration of Goals and Policy, "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. 1251(a). This reliance on the general preamble of the CWA, rather than the specific terms in § 401(d), ignores the context and relationship of the phrase "other appropriate requirement of state law" to the other provisions enumerated in § 401.

Section 401(d) sets forth specific requirements that limit the conditions a state may include in its certification of compliance with discharge requirements. The certification must set forth effluent limitations and monitoring requirements to assure compliance with the effluent limitations and standards under §§ 301 and 302, discharge controls under § 306, pretreatment standards under § 307, "and with any other appropriate requirement of State law set forth in such certification. . . ." Water quality standards under § 303, which are specifically enumerated in § 401(a), are included in § 401(d) by its enumeration of § 301, which incorporates § 303 through subsection 301(b)(1)(C).

For the purposes of water quality standards, the "other appropriate requirement" clause in § 401(d) is *not* open to any other requirement relating to uses of the waterway, as the Washington Supreme Court held. Its context requires that it be confined to requirements appropriate to the abatement or control of the *discharge of pollutants*, i.e., appropriate to compliance with the other sections of the CWA specifically enumerated in §§ 401(a) and (d), including § 303.

It is a familiar principle of statutory construction that when general words like "other appropriate requirement" follow specific terms, then "under the *ejusdem generis* rule of construction the general words are confined to the class and may not be used to enlarge it." *Cleveland v. United States*, 329 U.S. 14, 15 (1946). By relying on the broad goals of the Act, rather than the specific terms associated in § 401(d), the state court has given the phrase "any other requirement of state law" a breadth that swallows what precedes it, leaving § 401(d) limited only by the requirement that conditions thereunder be related in some way to water. *Cf. Arcadia v. Ohio Power Co.*, 498 U.S. 73, 111 S. Ct. 415, 419 (1990).³³ The sweep of this construction effectively transfers to the Department of Ecology of the State of Washington comprehensive authority over the operational flows of a hydroelectric project to be licensed under the FPA in order to achieve state policies under RCW 90.54.020(3)(a) concerning wildlife, fish, scenic, aesthetic and other environmental values, and state navigational values as well.

The court attempted to buttress its construction by asserting that the term "appropriate" could not have been limited by water quality standards in § 303 because that term is not enumerated in § 401(d). As shown above, however, this view is mistaken. Section 301—which is specifically enumerated—expressly incorporates, through subsection 301(b)(1)(C), water quality standards under the CWA, *i.e.*, under § 303.

The legislative history of § 401(d) confirms this reading. Section 401 traces its origins to § 21(b) of the Water Quality Improvement Act of 1970, P.L. 91-224, 84 Stat. 108. This statute imposed a new requirement that applicants for federal licenses or permits for activities which could result in a discharge must obtain a state

³³ See also *Hughey v. United States*, 495 U.S. 411, 110 S.Ct. 1979, 1984 (1990); *Federal Maritime Comm'n v. Seatrain Lines, Inc.*, 411 U.S. 726, 734 (1973).

certificate that the activity will not violate applicable state water quality standards. At the time, water quality standards, not restrictions on the discharge of pollutants, represented the primary safeguard against pollution.³⁴ In the Water Pollution Control Act Amendments of 1972, P.L. 92-500, 86 Stat. 816, Congress revamped the nation's pollution control program to establish the current system. That system focuses on the discharge of pollutants, and controls them through effluent limitations, water quality standards, standards of performance and toxic and pretreatment effluent standards embodied in §§ 301, 302, 303, 306 and 307 of the present Clean Water Act. What had been § 21(b) of the 1965 Act—which focused only on water quality standards—was expanded in § 401 "to assure that [state water quality certification authority] conforms and is consistent with the new requirements" ³⁵ Section 401 of the 1972 Act, however, did not enumerate § 303—water quality standards—among the relevant limitations and requirements for state water quality certificates. It was unnecessary to do so because § 301(b)(1)(C) expressly incorporated such standards. Nevertheless, in the ensuing administration of the Act, confusion developed as to Congressional intent concerning state conditioning authority. Congress therefore included in the Clean Water Act of 1977,³⁶ an amendment making clear that compliance with state water quality standards was a required element of a § 401 certificate. It provided:

Section 401 of the Federal Water Pollution Control Act is amended by inserting "303," after "302," in the phrase "sections 301, 302, 306, and 307 of this

³⁴ The Clean Water Act developed by legislative accretion beginning in 1948. See *EPA v. California*, 426 U.S. 200, 201 n.2 (1976).

³⁵ Federal Water Pollution Control Act Amendments of 1972, H.R. Rep. No. 911, 92nd Cong., 2d Sess. at 121-124 (1972). See also Conference Report to accompany S2770, S. Rep. No. 1236, 92nd Cong., 2d Sess. at 138 (1972).

³⁶ Clean Water Act of 1977, Pub. L. No. 95-217, § 64, 91 Stat. 1599.

Act," and in the phrase "section 301, 302, 306 or 307 of this Act", each time these phrases appear.

This concise formulation, however, had the effect of omitting § 303 from § 401(d), because in subsection (d) the sequence of the enumerated sections was interrupted by words describing those sections (App. 139a).

The omission was without significance. In the Conference Report on the 1977 amendments, the Committee explained that the omission of § 303 from other sections where sections 301, 302, 306 and 307 "are listed is in no way intended to imply that 303 is not included by reference to 301 in those other places in the Act, such as sections 301, 309, 402 and 509 and any other point where they are listed. Section 303 is always included by reference where section 301 is listed."⁸⁷ Thus, contrary to the Washington Supreme Court, the omission of § 303 from § 401(d) did not reflect a legislative purpose to make the state's ability to condition a water quality certificate under § 401(d) broader than its authority to deny it under § 401(a).

The Washington Supreme Court's failure to limit the phrase "any other appropriate requirement of state law" to the provisions enumerated in § 401(d), including § 303, and conditions appropriate to those limitations, has no basis either in the language or history of § 401(d). The same error is reflected in the case on which it principally relied: *Arnold Irrig. Dist. v. Department of Env'tl. Quality*, 79 Or. App. 136, 717 P.2d 1274, review denied, 301 Or. 765 (1986).

In *Arnold Irrigation*, the court concluded that violation of the sections enumerated in § 401(a)(1) or of state regulations issued thereunder, is the only basis on which the state may deny a water quality certificate. 717 P.2d at 1278. The court nevertheless ruled that the state could adopt as conditions under § 401(d) requirements

⁸⁷ Conference Report to accompany H.R. 3199, H. Rep. No. 830, 95th Cong., 1st Sess. at 96 (1977).

that would not justify a denial under § 401(a)(1). *Id.* It reasoned, as does the Washington Supreme Court (App. 11a-13a), that the conditioning power in § 401(d) is broader than the denial power under § 401(a)(1) because conditions in state certificates must assure compliance not only with enumerated sections but also "with any other appropriate requirement of State law", a phrase that does not appear in § 401(a)(1). This reasoning is illogical and inconsistent with the statutory scheme.

There would be no purpose to limiting denials under § 401(a)(1) to enumerated factors if § 401(d) conditions may be based on additional factors. As a practical matter, states would be able to veto the construction of projects for reasons not authorized by § 401(a)(1) simply by imposing § 401(d) conditions that render the projects infeasible. That is precisely what the Washington Department of Ecology has attempted to do with Tacoma's Elkhorn Hydroelectric Project. Washington may impose conditions under § 401(d) based on "any other appropriate requirement of State law" that is, under § 510, more stringent than federal standards for the abatement and control of pollutants. It may not, however, require water quality standards incompatible with the Act. *Cf. International Paper Co. v. Ouellette*, 479 U.S. 481, 497 (1987).

IV. WASHINGTON'S EXPANSIVE READING OF § 401 WOULD SUBVERT THE FPA'S COMPREHENSIVE LICENSING SCHEME

The Washington Supreme Court's holding leaves no limitation whatever on state conditioning authority under § 401(d) except that the condition be "water-quality related." Congress did not intend § 401(d) to have this effect. Instead, it carefully limited the state's conditioning authority to compliance with the effluent limitations, water quality standards and monitoring provisions set forth in § 401(d), and state law requirements appropriate to such limitations.

The heart of the federal licensing scheme in Part I of the FPA is regulation of the use of water in navigable streams, and the balancing of hydroelectric uses with the many other purposes served by such streams. FERC must carefully consider energy conservation, navigation, irrigation, flood control, water supply, fish and wildlife protection, recreational opportunities and other aspects of environmental quality as well as power needs. A state's "water quality-related" requirements, under the Washington Supreme Court's interpretation, may involve any of these purposes. Thus, Washington's expansive reading of § 401 allows the states to subvert—indeed to completely preempt—the federal licensing scheme set forth in the FPA by shifting to the states the federal determination as to how water will be used. Except for requirements related to the discharge of pollutants under § 401, however, Congress left such determinations with FERC under Part I of the FPA.

Washington's broad reading of § 401 as applied to hydroelectric projects amounts to a partial repeal of the FPA by implication. Repeals by implication are disfavored. To the maximum extent possible, courts must read related statutes together in order to give effect to each; only when the sense and purpose of each cannot be preserved by such a reading is implied repeal recognized. *Watt v. Alaska*, 451 U.S. 259, 267 (1981) (citing *Morton v. Mancari*, 417 U.S. 525, 549 (1974)). Limiting "any other appropriate requirement of State law" by the pollution discharge factors enumerated in §§ 401(a) and (d) gives effect to the sense and purpose of both § 401 and the FPA.

Over 40 years ago the Court in *First Iowa* rejected a state's attempt to impose a broad state permitting requirement on a hydroelectric project under the jurisdiction of the Federal Power Commission ("FPC"). The Court stated that requiring the applicant to secure a state permit would "vest in [state authorities] a veto power over the

federal project" that could "destroy the effectiveness of the Federal Act" and "subordinate to the control of the State the 'comprehensive' planning" with which the FPC was charged. *First Iowa Hydro-Elec. Coop. v. FPC*, 328 U.S. 152, 164 (1946). The validity of the *First Iowa* holding has been reaffirmed by the Court on numerous occasions.³⁸ Its significance here is that state-imposed conditions outside the scope of § 401(d) of the CWA have the same adverse impact on the scheme of the FPA as conditions imposed solely under the state law.

This Court recently rejected an attempt by a state to undermine FERC's primary role by imposing streamflows for fish protection under § 27 of the FPA. That provision, like § 101(g) of the CWA (33 U.S.C. 1251(g)), reserves certain authority to the states regarding proprietary water rights. *California v. FERC*, 495 U.S. 490 (1990). The Court pointed out that Congress, in its 1986 amendments to the FPA,³⁹ had the opportunity to alter FERC's role *vis-a-vis* the States, but chose instead "to elaborate and reaffirm *First Iowa's* understanding that the FPA establishes a broad and paramount federal regulatory role." 495 U.S. at 499.

Among the 1986 amendments, enacted some fourteen years after § 401 of the CWA, was § 10(j) of the FPA, 16 U.S.C. 803(j). It requires FERC to adopt conditions recommended by states to protect fish and wildlife, but permits FERC to reject any such recommendation whenever it finds that it "is inconsistent with the purposes and requirements" of Part I. FPA § 10(j)(2). Congress

³⁸ *Pacific Gas & Elec. Co. v. State Energy Resources Conservation & Dev. Comm.*, 461 U.S. 190, 223 n.34 (1983); *New England Power Co. v. New Hampshire*, 455 U.S. 331, 338-39 n.6 (1982); *City of Tacoma v. Taxpayers of Tacoma*, 357 U.S. 320, 334 (1958); *FPC v. Oregon*, 349 U.S. 435, 444-45 (1955).

³⁹ Electric Consumers Protection Act, Pub. L. No. 99-495 (100 Stat. 1243) (1986) ("ECPA").

would not have added this provision if the states already had the authority to impose, as a water quality condition, mandatory streamflow quantities for the purpose of protecting a fishery.⁴⁰

Washington's base flow statute, RCW 90.54.020(3)(a), requiring minimum flows for fish and wildlife, scenic and aesthetic, and other environmental values and navigational values, unquestionably would fall under the FPA preemption analysis reaffirmed in *California v. FERC*. Yet the Washington Supreme Court's expansive reading of CWA § 401 would permit the State to impose the same base flow requirement through the § 401 water quality certification process. This is contrary to Congress' view of FERC's role as set forth in *California v. FERC*.

The present case is a clear example of the consequences of allowing a state water quality agency, with a relatively narrow focus and agenda, to usurp FERC's comprehensive planning role by imposing an unreasonable and burdensome § 401 condition which FERC and the federal courts are powerless to revise. If the cleanest form of energy—hydroelectric power—is denied development without the balancing of all the relevant considerations the FPA requires, neither the objectives of the CWA nor the FPA will be served.

CONCLUSION

The petition for writ of certiorari should be granted.

⁴⁰ Compare § 102(b)(6) of the CWA, 33 U.S.C. 102(b)(6), which assigns control of "storage for regulation of streamflow for the purpose of water quality control" at hydroelectric facilities to the Administrator of EPA, not to the FERC or the states. FERC may impose a license condition for such purposes only if the Administrator of EPA so recommends.

Respectfully submitted,

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APPENDICES

1a

APPENDIX A

THE SUPREME COURT OF WASHINGTON

No. 58272-6

Thurston County No. 89-2-00413-2

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY,
DEPARTMENT OF FISHERIES and
DEPARTMENT OF WILDLIFE,
Respondents,

v.

PUD No. 1 OF JEFFERSON COUNTY and
CITY OF TACOMA, DEPARTMENT OF PUBLIC UTILITIES,
Appellants.

MANDATE

THE STATE OF WASHINGTON TO: The Superior
Court of the State of Washington in and for Thurs-
ton County.

This is to certify that the opinion of the Supreme Court of the State of Washington filed on April 1, 1993, became the decision terminating review of this court in the above entitled cause on April 21, 1993. This cause is mandated to the superior court from which the appeal was taken for further proceedings in accordance with the attached true copy of the opinion.

Pursuant to Rule of Appellate Procedure 14.3, costs are taxed as follows: No cost bills having been timely filed, costs are deemed waived.

[SEAL]

2a

IN TESTIMONY WHEREOF, I have hereunto set
my hand and affixed the seal of said Court at
Olympia, this 3rd day of May, 1993.

/s/ C. J. Merritt
C. J. MERRITT
Clerk of the Supreme Court,
State of Washington

3a

APPENDIX B

IN THE SUPREME COURT
OF THE STATE OF WASHINGTON

No. 58272-6

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY,
DEPARTMENT OF FISHERIES and
DEPARTMENT OF WILDLIFE,
Respondents,

v.

PUD No. 1 of JEFFERSON COUNTY and
CITY OF TACOMA, DEPARTMENT OF PUBLIC UTILITIES,
Appellants.

EN BANC

Filed Apr. 1, 1993

GUY, J.—This case arises as a result of plans of the City of Tacoma and the Jefferson County Public Utility District 1 (hereinafter Tacoma) to build a hydroelectric facility on the Dosewallips River. Federal law requires Tacoma to obtain a certificate from the Washington State Department of Ecology (Ecology) before beginning construction. Ecology granted the certificate but conditioned it upon Tacoma maintaining a certain minimum streamflow in the affected portion of the river. Tacoma argues that federal law preempts Ecology from setting this streamflow requirement, and that Ecology acted outside its authority because the requirement was designed to enhance the Dosewallips fishery rather than preserve it. We hold that there is no federal preemption and that setting the streamflow requirement was within Ecology's authority.

Facts

The Dosewallips River is a glacial stream that originates in the eastern Olympic Mountains. It flows east through the Olympic National Park, a national wilderness area, national forest land, and then private land before it empties into Hood Canal. The river is in pristine condition and supports populations of salmon, steelhead, and trout.

In 1982, Tacoma began planning to construct a hydroelectric power plant on the Dosewallips River just outside the Olympic National Park near the Elkhorn Campground. The "Elkhorn project", as it is called, will divert water from the river, use that water to run turbines to generate electricity, then return the water to the river 1.2 miles downstream. This will result in a reduction in the streamflow in the "bypass reach", which is the length of river between the initial diversion and where the water is returned downstream.

Federal law requires that Tacoma obtain a license from the Federal Energy Regulatory Commission (FERC) before beginning construction. In addition, section 401 of the federal Clean Water Act (Act), 33 U.S.C. § 1341, requires as a part of the licensing process that Tacoma obtain a water quality certificate from the State of Washington.

Tacoma applied to Ecology for the section 401 certificate in 1983. As part of the section 401 application process, Tacoma conducted a 2-year study of the effect of the Elkhorn project on fish habitat in the Dosewallips bypass reach. This study was performed in consultation with Ecology and other agencies, including the Washington State Departments of Fisheries and Wildlife, the United States Fish and Wildlife Service, the National Marine Fisheries Service, and the Point No Point Treaty

Council. At the conclusion of the study, Tacoma proposed to maintain minimum instream flows of between 65 cubic feet per second (cfs) and 155 cfs, depending on the month. Ecology eventually issued the section 401 certificate, but conditioned it upon Tacoma maintaining instream flows of between 100 cfs and 200 cfs.

Tacoma appealed Ecology's instream flows requirement to the Pollution Control Hearings Board (Board). The Board ruled that Ecology acted within its authority in placing base flow conditions within the section 401 certificate in order to preserve the Dosewallips fishery resource. The Board then held another hearing to consider Tacoma's argument that Ecology exceeded its authority because its flow regime for the Dosewallips was designed to enhance rather than merely preserve the fishery. Two of the three Board members agreed with Tacoma's argument and so reversed the flow rates set by Ecology. The third Board member dissented on the basis that Ecology's flow rates would not enhance the fishery.

The parties cross-appealed to the Thurston County Superior Court, which ruled that Ecology is not preempted from setting minimum streamflows, that the Board erred in finding Ecology's flows would enhance the Dosewallips fishery, and that in any case Ecology has the authority to require such an enhancement. The trial court therefore reinstated Ecology's streamflow rates. We granted Tacoma's motion for direct review.

II

Ecology's Authorization under the Clean Water Act

Tacoma argues that the Federal Power Act (FPA), 16 U.S.C. § 791a *et seq.*, preempts Ecology from conditioning a section 401 certificate upon the maintenance of a minimum streamflow. Ecology contends the preemption doctrine does not apply because it was acting

under the authority granted to it by the Clean Water Act, 33 U.S.C. § 1251 *et seq.*

We begin by addressing whether the Clean Water Act authorized Ecology to include base flow requirements in the section 401 certificate it issued to Tacoma. We conclude that it did.

A

State Water Quality Standards

Section 401 of the Clean Water Act generally requires any applicant for a federal license to obtain a state water quality certificate if the applicant's operations may result in a discharge into a waterway. 33 U.S.C. § 1341. The parties agree that Tacoma was required to obtain a 401 certificate from Ecology. The controlling provision here of section 401 is subsection (d), which provides:

Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 1311 or 1312 of this title [section 301 or 302 of the Act], standard of performance under section 1316 of this title [section 306 of the Act], or prohibition, effluent standard, or pretreatment standard under section 1317 of this title [section 307 of the Act], and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.

33 U.S.C. § 1341(d). Thus, under section 401(d), the state is required to include whatever conditions are "necessary to assure" compliance with specific provisions of the Act, as well as with "any other appropriate re-

quirement of State law". The parties agree that state water quality standards qualify as appropriate requirements of state law for purposes of section 401(d), and so may serve as the source for conditions imposed in the section 401 certificate. Ecology contends that the stream-flow conditions in the 401 certificate issued to Tacoma were necessary to assure compliance with Washington's water quality standards. We agree.

The stated purposes of Washington's water quality standards include the goal of establishing such standards as are "consistent with public health and public enjoyment thereof, and the *propagation and protection of fish, shellfish, and wildlife*". (Italics ours.) WAC 173-201-010. This purpose is consistent with the Environmental Protection Agency's (EPA) declaration that state water quality standards "should, wherever attainable, provide water quality for the protection and propagation of fish." 40 C.F.R. § 130.3 (1991). The standards define an antidegradation policy for the state's waters, as required under federal regulations. WAC 173-201-035(8) (implementing 40 C.F.R. § 131.12(a) (1991)). That policy includes the principle that "[e]xisting beneficial uses shall be maintained and protected and no further degradation which would interfere with or become injurious to existing beneficial uses will be allowed." WAC 173-201-035(8)(a). The Dosewallips River is specifically identified as a "Class AA" river. WAC 173-201-080(12). The characteristic uses of a Class AA river include "fish migration, rearing, spawning, and harvesting." WAC 173-201-045(1)(b)(iii).

In short, section 401 requires states to certify compliance with state water quality standards. Washington's standards prohibit the degradation of the state's waters, and prohibit the degradation of fish habitat and spawning in the Dosewallips in particular. Therefore, section 401 required Ecology to certify that the Elkhorn project would not degrade fish habitat and spawning in the Dose-

wallips. Given that Ecology's fisheries biologists determined that the instream flows urged by Tacoma risked such degradation. Ecology therefore could not issue the 401 certificate without imposing more protective instream flow conditions. Absent such a condition, Ecology could not assure compliance with state water quality standards.

We also note that the concept of pollution in the Clean Water Act is extremely broad. Section 502(19) of the Act, 33 U.S.C. § 1362(19), reads: "The term 'pollution' means the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water." Under this broad definition, man-induced alteration of streamflow level is "pollution". We further note a letter written by an EPA assistant administrator to the Secretary of FERC. The letter takes issue with an assertion in a FERC report that conditions related to fish, wildlife, vegetation, and recreation are inappropriate in section 401 certificates needed to obtain licenses from FERC. The letter states:

[P]rotection of water quality involves far more than just addressing water chemistry. Rather, protection of water quality includes protection of multiple elements which together make up aquatic systems including the aquatic life, wildlife, wetlands and other aquatic habitat, vegetation, and hydrology required to maintain the aquatic system. Relevant water quality issues include . . . the diversity and composition of the aquatic species . . . [and] habitat loss . . .

Brief of Respondent, at 94 (letter from LaJuana Wilcher, Assistant Administrator of the EPA, to the Honorable Lois D. Cashell, Secretary of FERC).

Finally, other states also have water quality standards that make reference to fish and wildlife concerns, and such concerns have been held properly to require instream flow conditions in section 401 certificates. For example, in *Bangor Hydro-Elec. Co. v. Board of Env'tl. Protec.*,

595 A.2d 438 (Me. 1991), a section 401 certificate applicant argued that the Maine Board of Environmental Protection had exceeded its authority in asking for information about the project's effect upon fish habitat. The Maine Supreme Court rejected this argument and explained that under Maine's water quality standards, the "designated uses" of the affected river included fish habitat. The court stated that because these designated uses are an integral part of the state water quality standards, the Board's information request was proper. 595 A.2d at 443. Similarly, in *Hi-Line Sportsmen Club v. Milk River Irrig. Dists.*, 241 Mont. 182, 786 P.2d 13 (1990), the Montana Board of Health and Environmental Sciences issued a section 401 certificate for the construction and operation of a "siphon scheme" at a hydroelectric dam that would have raised the water temperature in the effected river. The court upheld the district court ruling that the record failed to show the project would not violate state water quality standards, which included provisions regarding the use of the river for fish habitat. 241 Mont. at 187-88. See also *Georgia-Pacific Corp. v. Vermont Dep't of Env'tl. Conservation*, 35 Env't Rep. (BNA) 2046 (Vt. Super. Ct. Oct. 4, 1991), *aff'd*, 35 Env't Rep. (BNA) 2052 (Vt. Sup. Ct. Sept. 14, 1992) (water quality standards recognized as appropriately concerning aesthetics, recreation, and wildlife).

Tacoma argues that water quality standards are limited to pollution and discharges, as opposed to stream flow levels. It is true that the standards include provisions regarding pollution discharges. See e.g., WAC 173-201-045(1)(c)(vii) (criteria for concentrations of toxic, radioactive, and deleterious materials in Class AA waters). However, as explained above, the standards' explicitly-stated antidegradation policy and classification of specific bodies of water in terms of characteristic uses, as well as the standards' broad purpose, all demonstrate

a broad concern for water quality, not just with pollution discharges. See *Bangor Hydro-Elec. Co. v. Board of Env'tl. Protec.*, *supra* (water quality standards would be a nullity if state could not consider designated uses).

B

Section 401's Integration of

"Any other Appropriate Requirement of State Law"

Ecology also maintains that the streamflow condition it imposed in Tacoma's section 401 certificate was an appropriate measure to carry out RCW 90.54.020(3)(a), which provides that "[p]erennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values." Tacoma, joined by a group of utilities acting as amicus curiae, argues that the phrase "any other appropriate requirement of State law" refers only to state water quality standards. The Board ruled that the phrase refers to all state water quality-related statutes and rules, including, but not limited to, the water quality standards the state has adopted as required by section 303 of the Clean Water Act, 33 U.S.C. § 1313, and that Ecology's streamflow conditions were necessary to assure compliance with RCW 90.54.020(3)(a). We agree with the Board's interpretation.

We are required to interpret the words of a statute in accordance with their usual and ordinary meaning. *People's Org. for Wash. Energy Resources v. Utilities & Transp. Comm'n*, 104 Wn.2d 798, 825, 711 P.2d 319 (1985). The phrase "any other appropriate requirement of State law" contains no language to suggest its reference should be limited only to state water quality standards. Its meaning is not restricted to specific statutory or regulatory provisions, but only to those requirements of state law that are "appropriate".

The phrase's context within the Clean Water Act offers guidance as to its meaning. Most generally, Congress's broad purpose in enacting the Clean Water Act was "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251 (a). This broad purpose suggests that what state laws qualify as "appropriate" for purposes of section 401(d) should also be understood broadly. In addition, section 401(d) expressly lists sections 301, 302, 306, and 307 of the Act as sources for the limitations in section 401 certificates. Thus, where Congress intended to refer to a specific provision, it did so. In contrast, section 303 (33 U.S.C. § 1313)—the section requiring states to adopt water quality standards—is *not* listed in section 401. If Congress intended to refer only to state water quality standards, it could have specifically referred to them. That Congress did not do so is evidence that it intended the phrase "any other appropriate requirement of State law" to refer broadly to all state water quality-related laws, not just to state water quality standards adopted pursuant to section 303.

The scope of "any other appropriate requirement of State law" was directly addressed in *Arnold Irrig. Dist. v. Department of Env'tl. Quality*, 79 Or. App. 136, 717 P.2d 1274, *review denied* 301 Or. 765 (1986). There, the Oregon Department of Environmental Quality had denied a request for a section 401 certificate on the ground that the applicants failed to provide a statement that the hydroelectric project was compatible with the country's comprehensive plan and land use ordinances. The applicants objected, saying that only water quality standards could be considered. The court rejected this on the basis explained above: if Congress had intended to make the section 303 standards the exclusive water quality criteria states may use in placing limitations in section 401 certificates, then Congress could have specifically mentioned those standards in section 401(d). 79 Or. App. at 142. The court therefore held that any

water quality related state law qualifies as an "appropriate requirement of State law" for purposes of section 401(d). 79 Or. App. at 142. *See also Mobil Oil Corp. v. Kelley*, 426 F. Supp. 230, 234 (S.D. Ala. 1976) (holding section 401(d) allows state to condition certification upon compliance with any requirement the state deems appropriate under state law). *But see Niagara Mohawk Power Corp. v. New York Dep't of Env'l Conservation*, — A.D.2d —, 992 N.Y.S.2d 141 (1993) (interpreting phrase within Clean Water Act in light of Congress's presumed intent in enacting FPA amendments).

The legislative history of section 401(d) further supports this interpretation. In particular, the differing treatment Congress gave sections 401(a) and 401(d) in a 1977 amendment is revealing. Generally, section 401(a) identifies specific provisions of the Clean Water Act and provides that noncompliance with any of those provisions enables a state to deny certification; section 401(d) confers authority on states to condition certification. As originally enacted in 1972 as part of the Federal Water Pollution Control Act Amendments (FWPCA), section 401(a) did not list section 303. Pub. L. No. 92-300, § 2, 86 Stat. 816, 877.79 (1972). Five years later, when Congress substantially supplemented the FWPCA by enacting the Clean Water Act, Congress amended section 401(a) to include reference to section 303. Pub. L. No. 95-217, § 64, 91 Stat. 1566, 1599 (1977). A Senate report submitted at the time explained that the purpose of the amendment was to follow the original congressional intent and to clarify that consideration of state water quality standards was part of the certification process under section 401(a). S. Rep. No. 370, 95th Cong., 1st Sess. 72-73, *reprinted in* 1977 U.S. Code Cong. & Admin. News 4326, 4397-398. In so amending section 401(a), however, Congress failed to amend section 401(d) in the same way. As two commentators writing on this subject have explained,

[b]ecause of this omission, it seems clear that Congress did not mean to restrict conditions on certifications only to those necessary to assure compliance with section 303 water quality standards. Rather, Congress recognized a difference between the authority it provided in section 401(a)(1) to *deny* certification and that which it conferred in section 401(d) to *condition* certification. *It intended that the broader power contained in section 401(d) would allow the states to condition certification on compliance with state law provisions other than water quality standards adopted pursuant to section 303.*

(Some italics ours.) Ransel & Meyers, *State Water Quality Certification and Wetland Protection: A Call to Awaken the Sleeping Giant*, 7 Va. J. of Nat. Resources L. 339, 355 (1988).

We conclude that the phrase "any other appropriate requirement of State law" in section 401(d) does not refer only to state water quality standards. We agree with the *Arnold* court that the phrase is a congressional authorization to the states to consider all state action related to water quality in imposing conditions on section 401 certificates. 79 Or. App. at 142.

We hold that the streamflow conditions Ecology included in the 401 certificate it issued to Tacoma were an appropriate measure to assure compliance with Washington's water quality standards. We also hold that a section 401 water quality certificate may include conditions to enforce all state water quality-related statutes and rules, including but not limited to, state water quality standards. Inasmuch as issues regarding water quality are not separable from issues regarding water quantity and base flow, we further hold that RCW 90.54.020(3) (a) qualifies as an "appropriate requirement of State law" for purposes of section 401(d), and therefore that Ecology's base flow limitation in the 401 certificate was

an appropriate measure to assure compliance with RCW 90.54.020(3)(a) as well as the water quality standards.

III

Federal Preemption

Having concluded that RCW 90.54.020(3)(a) and Washington's water quality standards authorize Ecology to impose streamflow conditions in section 401 certificates, we next consider Tacoma's contention that the FPA preempts Ecology's action. We reject Tacoma's preemption argument.

A.

The Threshold Requirement of State Action

The doctrine of federal preemption is based on the supremacy clause of the United States Constitution, U.S. Const., art. 6, cl. 2. Application of the doctrine presupposes as a threshold requirement some state action to be preempted by federal law. *See generally* L. Tribe, *American Constitutional Law* § 6-25 (2d ed. 1988). Here, several factors persuade us that Ecology's action in imposing a base flow condition in the 401 certificate lacks the character of state action required for federal preemption to apply.

First, a section 401 certificate is a federal permit required under the Clean Water Act, 33 U.S.C. § 1341, and in issuing this federal certificate, the state is required to set forth certain limitations. To the extent that the state's role is mandatory in these ways, the state cannot be said to be acting independently of the federal government.

Second, the sources of the streamflow limitation at issue here are state laws integrated into the Clean Water Act. In particular, Ecology's action was appropriate to assure compliance with RCW 90.54.020(3)(a) and Washington's water quality standards, which are inte-

grated into the Act as "appropriate requirement[s] of State law" under section 401(d).

Third, federal involvement in the development of state water quality standards is extensive. Those standards are required under the Clean Water Act, 33 U.S.C. § 1313. The Act requires states to devise the standards in accordance with federal regulations and to submit them to the EPA for approval. 33 U.S.C. § 1313. After the EPA approves the state's submitted standards, they become the water quality standards for the state. 33 U.S.C. § 1313(c)(3). Washington's water quality standards, in particular, have been duly adopted by the state and approved by the EPA. 50 Fed. Reg. 29,761 (1983) (noting EPA's approval of Washington's water quality standards). If a state fails to submit standards to the EPA, or if the standards it does submit are inconsistent with the Act, the EPA promulgates its own standards for the state. 33 U.S.C. § 1313(c)(4); *see also* 56 Fed. Reg. 58,477 (Nov. 19, 1991) (to be codified at 40 C.F.R. pt. 131) (proposed rulemaking by EPA to bring Washington's water quality standards into compliance with section 303(c)(2)(B) of the Act). This statutory framework gives water quality standards a hybrid character: they have the character of state laws insofar as the states initially promulgate them, but they have a federal character insofar as the EPA regulates their content and must formally approve them before they actually become the state's water quality standards. Indeed, in *Arkansas v. Oklahoma*, 503 U.S. —, 117 L. Ed. 2d 239, 257, 112 S. Ct. 1046 (1992), the Court declared that state water quality standards "are part of the federal law of water pollution control" at least insofar as they affect issuance of permits in other states. Similarly, the significant federal involvement in state water quality standards must be recognized when considering whether federal preemption applies to prevent a state from acting to assure compliance with them.

Finally, any conditions imposed in a 401 certificate become part of the federal license for which the certificate is required. Section 401(d) of the Act provides that any valid certification issued under section 401 "shall become a condition on any Federal license" for the activity in question. "FERC may not alter or reject conditions imposed by the states through section 401 certificates." *United States Dep't of the Interior v. Federal Energy Regulatory Comm'n*, 952 F.2d 538, 548 (D.C. Cir. 1992). FERC itself has recognized that the terms and conditions included in a section 401 certificate "become terms and conditions of the license as a matter of law." [Apr.-June 1990 Transfer Binder] 51 Fed. Energy Reg. Comm'n (CCH) ¶ 61,268 at 61,343. Thus, the condition at the heart of the present controversy—the condition within the 401 certificate Ecology issued to Tacoma—will be, as a matter of law, a term of whatever hydroelectric operating license FERC eventually issues to Tacoma; as such, the condition will be a part of federal law.

By including base flow limitations in the section 401 certificate it issued to Tacoma, Ecology was acting to fulfill its obligations under federal law. The section 401 certificate must assure compliance with state laws integrated into the Clean Water Act. In particular, the certificate must assure compliance with water quality standards, which are regulations the content of which was substantially determined by the EPA and which assumed the status of state water quality standards only after the EPA gave its approval. Finally, the streamflow condition, as part of the 401 certificate, also becomes a term of the FERC license by operation of law and as such a part of federal law. These factors collectively demonstrate such a significant and pervasive federal involvement that Ecology's action cannot be fairly regarded as state action for purposes of the application of federal preemption. Simply put, federal preemption doctrine does not apply in a context where a state is acting to fulfill its

federally mandated role in the comprehensive federal scheme embodied in the Clean Water Act.

B

Preemption Doctrine

Even if the threshold requirement of state action were met, the well-established principles regarding federal preemption would not support finding preemption in the present case.

As we recently observed in *Inlandboatmen's Union of the Pac. v. Department of Transp.*, 119 Wn.2d 697, 701, 836 P.2d 823 (1992), there are two well-established ways in which federal law may preempt state law: field preemption and conflict preemption. Field preemption may arise from either an explicit or an implicit expression of Congress's intent. Absent explicit preemptive language, Congress's intent to supersede state law may be implied if

- (1) a scheme of federal regulation is so pervasive as to make reasonable the inference that Congress left no room for the states to supplement it, (2) if the federal act touches a field in which the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject, or (3) if the goals sought to be obtained or the obligations imposed reveal a purpose to preclude state authority.

Inlandboatmen's Union, at 701. Conflict preemption may arise either when compliance with both federal and state laws is physically impossible, or when state law stands as an obstacle to the accomplishment and execution of Congress's full purposes and objectives. *Inlandboatmen's Union*, at 702.

In the case of either field or conflict preemption, the essential inquiry is congressional intent. *Wisconsin Pub.*

Intervenor v. Mortier, 501 U.S. —, 115 L. Ed. 2d 532, 542, 111 S. Ct. 2476 (1991). In addition, "[t]here is a strong presumption against finding preemption in an ambiguous case, and the burden of proof is on the party claiming preemption." (Footnote omitted.) *Inlandboatmen's Union*, at 702.

The basis for Tacoma's preemption argument is the FPA, which empowers FERC to license projects designed to develop power from any stream or other body of water over which Congress has jurisdiction. 16 U.S.C. § 797(a). The FPA, as amended in 1986 by the Electric Consumers Protection Act, also directs that in issuing such licenses FERC must "give equal consideration to the purposes of energy conservation, the protection, mitigation of damages to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality." 16 U.S.C. § 797(e). Congress further declared that FERC may not issue a license unless it judges the project to be "best adapted to a comprehensive plan" advancing these competing values. 15 U.S.C. § 803(a). In order to ensure this, the FPA requires FERC to consider recommendations from state and federal agencies and Indian tribes. 16 U.S.C. § 803(a)(2). In addition, in order to protect, mitigate damages to, and enhance fish and wildlife, the FPA requires FERC to adopt the recommendations of state and federal fish and wildlife agencies unless FERC believes such recommendations are inconsistent with the purposes of the FPA or other applicable law. 16 U.S.C. § 803(j)(1). FERC may reject the recommendations of state or federal fish and wildlife agencies, but it must publish its findings for doing so and state in those findings that its own conditions will comply with the FPA's standards regarding fish and wildlife protection. 16 U.S.C. § 803(j)(2).

Tacoma argues that the FPA's comprehensive scheme of licensing hydropower projects preempts Ecology from

setting streamflows in the section 401 certificate. The existence of the Clean Water Act and the authority and obligations given to the states under it make this argument unpersuasive.

Considering first field preemption, there is neither an express nor an implied indication of any congressional intent to occupy the field so as to preclude states from exercising their authority and fulfilling their obligations under the Clean Water Act. When the FPA and the Clean Water Act are considered together, the comprehensive scheme that emerges is one in which Congress left room for the states to supplement the FPA through the section 401 certification process. Enforcement of state laws is part of the federal scheme inasmuch as section 401 of the Act requires states to assure compliance with appropriate state laws. The comprehensive scheme consisting of both the Clean Water Act and the FPA presupposes rather than precludes the exercise of state authority. Consequently there is no basis for finding field preemption here.

As regards conflict preemption, there is no actual conflict between Ecology's action and the FPA. Compliance with Ecology's streamflow condition and the FPA is physically possible, and fulfillment of that condition does not stand as an obstacle to the accomplishment and execution of Congress's purposes. Indeed, exactly the same streamflow condition could have been required directly under the FPA, either by FERC directly or by FERC adopting recommendations regarding streamflow from Ecology during the licensing process. Moreover, finding conflict preemption under circumstances such as those presented here would have the effect of requiring Ecology to guess which elements of the 401 certificate might conflict with actions FERC might take at a later time, and then decline to condition the certificate based on this guess—in violation of Ecology's mandate under the Act. We cannot believe Congress could have intended to create such an administrative nightmare.

To support its preemption argument, Tacoma relies on *California v. Federal Energy Regulatory Comm'n*, 495 U.S. 490, 109 L. Ed. 2d 474, 110 S. Ct. 2024 (1990). There, FERC issued a license for a hydroelectric project and, in doing so, set a streamflow requirement in order to protect the fish in the affected portion of the river. The California Water Resources Control Board (WRCB) later issued an order requiring the licenses to conform to a higher streamflow requirement. 495 U.S. at 496. The WRCB relied on section 27 of the FPA, which provides:

Nothing contained in this chapter shall be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein.

FPA, § 27, 16 U.S.C. § 821. The Court rejected the WRCB's argument, and held that FERC's powers as granted under the FPA preempted the WRCB's attempt to set its own streamflow requirements. The Court explained that under the FPA, FERC's power is exclusive unless some power is explicitly reserved for the states, and that section 27's reservation of power does not include the power to set instream flows. According to the Court, the words of section 27 "are confined to rights of the same nature as those relating to the use of water in irrigation or for municipal purposes." 495 U.S. at 498 (quoting *First Iowa Hydro-Elec. Coop. v. Federal Power Comm'n*, 328 U.S. 152, 176, 90 L. Ed. 1143, 66 S. Ct. 906 (1946)).

Tacoma argues that Ecology is trying to do precisely what the WRCB was attempting to do in *California v. Federal Energy Regulatory Comm'n*, namely, set a minimum instream flow rate for a federally licensed power

project, and therefore Ecology is no less preempted by the FPA than was the WRCB.

The present case is distinguishable from *California v. Federal Energy Regulatory Comm'n* on two grounds. First, in *California v. Federal Energy Regulatory Comm'n*, there was an actual conflict between the federal and state governments. FERC and the California WRCB had both issued orders regarding streamflow, and those orders were in conflict. No such conflict exists in the present case. Second, in *California v. Federal Energy Regulatory Comm'n*, the Clean Water Act was not at issue or even mentioned. The issue was the scope of what powers had been saved to the states under section 27 of the FPA. The authority for California's action was not derived from federal law. Here, the issue is whether the FPA somehow precludes Ecology from exercising the authority granted it, and the responsibilities delegated to it, under the Clean Water Act. The way in which the Clean Water Act is implicated in the present case completely alters the legal context and renders untenable Tacoma's preemption argument. The presumption against finding preemption in ambiguous cases further strengthens this conclusion. See *Inlandboatmen's Union*, 119 Wn.2d at 702.

In short, whereas *California v. Federal Energy Regulatory Comm'n* presented a straightforward case of a state acting on its own authority, the present case is one in which Ecology derives authority for its action directly from federal law. State law and state action are involved only to the extent they are integrated into the Clean Water Act. Our interpretation of Ecology's duties under the Act, therefore, does not conflict with the United States Supreme Court's interpretation of the scope of the power reserved to the states under section 27 of the FPA.

We conclude that Tacoma has not carried its burden of establishing federal preemption.

The Enhancement Issue

We next consider the Board's finding that Ecology's streamflow condition for the Elkhorn project enhances the fishery in the Dosewallip River. The trial court ruled that this was error. We agree.

A

Factual Background

To understand the Board's factual ruling regarding enhancement, it is necessary to review the nature of the study conducted to determine the instream flow. After Tacoma filed its initial application with Ecology for the section 401 certificate, Ecology asked Tacoma to conduct a study to determine what level of water should be maintained in the bypass reach in order to preserve adequate habitat for fish. Ecology also requested that Tacoma perform this study using a method known as "instream flow incremental methodology", or "IFIM". Generally, the IFIM process first involves collecting data about water velocity and depth, the substrate of the river, what species of fish inhabit the river, and what developmental stages the fish go through at what times of year. The data are then assembled to enable predictions about how the water depth and velocity will change at different flow levels, and to show what depths, velocities, and substrates are most suitable for each life stage of each fish species in the river. A computer program known as "PHABSIM" (for physical habitat simulator) is then run using this assembly of data. The output of the PHABSIM program includes a set of charts or tables. Each chart or table indicates for a given fish species and a given life stage of that species the "weighted usable area" available at different flow levels. "Weighted usable area", roughly, is how much area of the river the fish can use as habitat.¹ These are then used by fisheries

¹ More specifically, "[w]eighted usable area is an index computed by multiplying the surface area of a portion of a stream by a

biologists to determine the appropriate instream flows for the river.

In the present case, Tacoma and Ecology worked together in producing the results of the IFIM study, but then disagreed as to the appropriate instream flows. Tacoma claims that fish production will be preserved using the flow regime it has proposed, but that the flow regime Ecology imposed in the section 401 certificate would actually enhance fish production. The Board agreed with Tacoma. In its findings of fact, the trial court found the Board's conclusion to be clearly erroneous.

B

Standard of Review

The Board is one of four administrative boards comprising the environmental hearings office, which is created by RCW 43.21B.005. The members of the Board are appointed by the Governor with the advice and consent of the Senate. RCW 43.21B.020. When a Board decision is rendered pursuant to a formal hearing, as was the case here, judicial review is conducted pursuant to the Administrative Procedure Act, RCW 34.04 or RCW 34.05. (Because the present case was initiated prior to July 1, 1989, RCW 34.04 applies. RCW 34.05.902.) Under RCW 34.04.130(6)(a), the court may reverse an agency's determination if it was "clearly erroneous in view of the entire record". A finding is clearly erroneous when, although there may be evidence to support it, the reviewing court on the entire record is left with the firm and definite conviction that a mistake has been committed. *Cougar Mt. Assocs. v. King Cy.*, 111 Wn.2d 742,

weighting factor that describes the suitability of the stream for the organism of interest. It displays the surface area of stream in square feet of optimal habitat per 1,000 linear feet of stream." Cavendish & Duncan, *Use of the Instream Flow Incremental Methodology: A Tool for Negotiation*, 6 Env't Impact Assessment Rev. 347, 349 (1986).

747, 765 P.2d 264 (1988). Thus, the proper standard of review for the trial court to have used in evaluating the Board's factual determination was the clearly erroneous standard.

Furthermore, this court has stated that "[u]pon appeal from a superior court's application of the 'clearly erroneous' standard, the appellate court applies the same standard directly to the administrative decision." *Department of Ecology v. Ballard Elks Lodge* 827, 84 Wn.2d 551, 555, 527 P.2d 1121 (1974). Therefore, in the present case we apply the clearly erroneous standard directly to the Board's decision. Cf. *Schub v. Department of Ecology*, 100 Wn.2d 180, 183-84, 667 P.2d 64 (1983) (applying clearly erroneous standard directly to agency's determination rather than board's).

Finally, it is well settled that due deference must be given to the specialized knowledge and expertise of an administrative agency. E.g., *Schub*, 100 Wn.2d at 187. Here, Ecology was exercising its expertise in judging the appropriate instream flow rate for the Elkhorn project. Therefore, in analyzing the Board's decision under the clearly erroneous standard, we also give due deference to Ecology's expertise in this area.

C

The Board's Assessment of Ecology's Preservation Flow

At the hearing before the Board, there was testimony from six fisheries biologists representing five different states and federal agencies. These biologists were all involved in the IFIM study and in Ecology's setting of instream flow rates for the Dosewallips. Each expert testified that his or her intent in setting the flow rates, or the intent of the agency represented, was to preserve and protect the fishery in the Dosewallips, not to enhance

it.² In light of this testimony, it is manifestly unreasonable to believe that the agencies *intentionally* sought to enhance the Dosewallips fishery. Moreover, these experts also testified that in their opinions Ecology's flows would not in fact enhance the Dosewallips fishery. The one expert who testified for Tacoma, Phillip Hilgart, said that he could not tell whether Ecology's flow would enhance the fishery.

In light of this unrefuted testimony, the Board's conclusion that Ecology's flows would enhance the Dosewallips fishery is questionable. Apparently the Board assumed that spawning habitat is the limiting factor in fish production and then reasoned that Ecology's flow will increase fish production because it will provide more spawning habitat than is available under natural conditions. We find persuasive Ecology's position, shared by the trial court as well as the dissenting member of the 3-person Board, that this reasoning is erroneous.

First, the Board appears not to have adequately considered the uncertainty inherent in the computer modeling of the complex biological systems of the river. For example, the PHABSIM model uses only three of the many variables that determine fish habitat. The three variables PHABSIM uses are water depth, water velocity, and substrate. There was testimony before the Board, however, that there are other important flow-related habi-

² E.g., testimony of Hal Beecher, Department of Wildlife fisheries biologist, Transcript of Proceedings (Dec. 15, 1987), at 167; testimony of Kenneth Bruya, Department of Fisheries biologist, Transcript of Proceedings (Dec. 17, 1987), at 138-39; testimony of Brad Caldwell, Department of Ecology fisheries biologist, Transcript of Proceedings (Dec. 16, 1987), at 104; testimony of Jean Caldwell, Department of Fisheries biologist, Transcript of Proceedings (Dec. 17, 1987), at 48; testimony of Stephen Ralph, Point No Point Treaty Council fisheries biologist, Transcript of Proceedings (Dec. 17, 1987), at 110; testimony of Elaine Rybak, United States Fish & Wildlife Service fisheries biologist, Transcript of Proceedings (Dec. 17, 1987), at 98.

tat variables, including (1) predation, (2) competition and territoriality, (3) sedimentation and its effect on eggs and food supplies, (4) the adequacy of flows to prevent eggs from dehydrating, and (5) the creation of barriers to migration. Because PHABSIM's predictions regarding fish habitat are based on this artificial concept of habitat, Ecology's biologists were conservative in their estimation of the flows that would best protect the fishery, and there was no evidence that the flows would in fact enhance the fishery.

The Board also ignored the fact that one of the three habitat variables the PHABSIM model uses was incomplete. In particular, the PHABSIM model is designed for three measurements regarding water velocity. Because of the difficulties in getting measurements for the Dosewallips, however, only one measurement was used in the IFIM study conducted here. This further underscores the appropriateness of Ecology's conservative approach to setting minimum instream flows.

Furthermore, the Board assumed that the amount of fish habitat available under natural conditions can be reliably measured by reference to the river's "50 percent exceedence flow." The 50 percent exceedence flow for a river is that level of flow at which half the daily flows during a 1-month period are lower and half the daily flows are higher. The testimony was that for a river like the Dosewallips, the flow of which changes constantly and dramatically, the 50 percent exceedence flow may be meaningless as a measure of normal conditions. In her dissent, Board member Bendor points out that in 1 month, 210 cfs was the 50 percent exceedence flow whereas 800 cfs was the average flow.

The Board also erroneously assumed that because the computer model maximizes for an "optimum" flow regime for fish, this means that overall fish production will be increased. The record before us indicates that FHABSIM optimizes a flow regime only in the sense that for a given

species and a given life stage of that species, the model predicts at what flow the largest amount of weighted usable area of habitat will be present. Even on the sanguine assumption that maximizing weighted usable area is "optimum" for that life stage of that species, the same flow regime may not be optimum for other life stages of the same species or for other species.

Finally, the Board overlooked the uncertainty in the assumption that the limiting factor in fish production in the Dosewallips is spawning habitat. There was expert testimony, including testimony from Tacoma's expert witness Phillip Hilgert, that it is uncertain whether fish productivity in the bypass reach is spawning limited. The testimony regarding this assumption was at best equivocal. Mr. Hilgert at one point testified that "streams in Western Washington are *rearing* limited, and indeed much of the agencies' harvest management practice is based on the assumption of rearing limitations." (*Italics ours.*) Transcript of Proceedings (Dec. 16, 1987), at 33. Another expert testified he has never believed that the Dosewallips is spawning limited.

Our examination of the record leaves us with the firm and definite conviction that a mistake has been made. Ecology's intent was clearly to preserve, not to enhance, the fishery in the Dosewallips, and the Board's reasoning for its view that Ecology's flows would enhance the fishery is insupportable. Therefore we hold the Board's finding that Ecology's instream flow rates are an enhancement flow is clearly erroneous. Because we so hold, we need not reach the question whether Ecology has the authority to enhance the Dosewallips fishery by a base flow requirement in the section 401 certificate.

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V

Conclusion

We hold that federal law does not preempt Ecology from including minimum streamflow conditions in Tacoma's section 401 certificate, and that the Board erred in finding that Ecology's flows would enhance the Dosewallips fishery. We therefore conclude that the section 401 permit is valid as originally issued by Ecology. The Superior Court is affirmed.

/s/ Guy, J.

WE CONCUR:

/s/ Andersen, C.J.

/s/ Durham, J.

/s/ Utter, J.

/s/ Smith, J.

/s/ Brachtenbach, J.

/s/ Johnson, J.

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APPENDIX C

IN THE SUPERIOR COURT
OF THE STATE OF WASHINGTON
IN AND FOR THE COUNTY OF THURSTON

— — — — —
No. 89-2-00413-2

STATE OF WASHINGTON, DEPARTMENTS OF ECOLOGY,
FISHERIES, AND WILDLIFE,

Appellants,

v.

PUD No. 1 OF JEFFERSON COUNTY
and CITY OF TACOMA,

Respondents.

— — — — —
PUD No. 1 OF JEFFERSON COUNTY
and CITY OF TACOMA,

Appellants,

v.

STATE OF WASHINGTON, DEPARTMENTS OF ECOLOGY,
FISHERIES, AND WILDLIFE,

Respondents.

— — — — —
FINDINGS OF FACT, CONCLUSIONS OF LAW
AND FINAL JUDGMENT

[Filed Aug. 14, 1991]

This matter is an appeal of a decision of the Pollution Control Hearings Board (the Board or PCHB), PCHB No. 86-118. The PCHB conducted a full evidentiary hearing in this matter on December 15-18, 1988. In this proceeding, testimony was taken, and documentary evi-

dence was submitted. The PCHB issued its final decision on January 25, 1989.

The State Department of Ecology (respondent before the PCHB), and the State Departments of Fisheries and Wildlife (intervenors before the PCHB) appealed the decision of the PCHB to this Court on February 24, 1989. The City of Tacoma and PUD No. 1 of Jefferson County cross-appealed the PCHB's decision to this Court on March 1, 1989.

Appellant Department of Ecology has appeared in this matter by Jay J. Manning, Assistant Attorney General. Appellants Department of Fisheries and Department of Wildlife appeared by William C. Frymire, Assistant Attorney General. Cross-Appellants PUD No. 1 of Jefferson County and City of Tacoma appeared by Mark L. Bubenik, Assistant City Attorney, and Albert R. Malanca of Gordon, Thomas, Honeywell, Malanca, Peterson & Daheim for Tacoma.

This Court has reviewed the entire record produced before the PCHB, the file herein, including both parties' briefs, and has been presented with oral argument from all parties. On May 8, 1991, the Court issued a Memorandum Opinion. A copy of the Memorandum Opinion is attached as Exhibit 1 and is incorporated into this Final Judgment by this reference. Based on all of the foregoing, the Court makes the following FINDINGS OF FACT AND CONCLUSIONS OF LAW.

FINDINGS OF FACT

I.

The Court hereby adopts and accepts the PCHB's Findings of Fact I-VIII, and X. These Findings of Fact are set forth below for the convenience of the reader.

Finding of Fact I

This matter concerns the Dosewalips [sic] River on the Olympic Peninsula of Washington.

Finding of Fact II

Appellants (hereafter Tacoma) propose to construct a hydroelectric project on the Dosewalips River. The project would consist of a weir which would divert water into a pipeline that parallels the course of the river but initially remains somewhat level as the river descends downstream. At the downstream end of the pipeline, water would fall through a generator and then be discharged back into the river.

Finding of Fact III

The effect of Tacoma's project would be to reduce the river flow in the segment of the Dosewalips River paralleled by the pipeline. That segment of the river is fairly steep and canyon-like. The natural flows through this "by-pass reach" are vigorous during most of the year. These natural flows are essentially undiminished by appropriation at present.

Finding of Fact IV

Tacoma's hydroelectric proposal must be licensed by the U.S. Federal Energy Regulatory Commission (FERC). Under Section 401 of the Federal Clean Water Act the respondent, Washington State Department of Ecology (DOE), must certify compliance with state water quality requirements. We have previously ruled that such a certification may include base flow limitations in the by-pass reach of the Dosewalips River pursuant to RCW 90.54.020 (3)(a) of the State Water Resources Act, of 1971. See "Order Granting Cross Motion for Summary Judgment" entered April 10, 1987.

Finding of Fact V

The base flows for the by-pass reach of the Dosewallips, as contained in DOE's Section 401 Water Quality Certification, were appealed by Tacoma. The notice of appeal was filed before us on July 11, 1986. Following pre-hearing motions, the issues remaining for hearing were reduced to the following:

1. Whether the specific base flows imposed by DOE in this instance are appropriate for the preservation of the fishery resource and related values?
2. What quantity and type of fish inhabit the waters to be affected by the base flows prescribed by DOE?

Finding of Fact VI

Taking the second issue first, we find that the by-pass reach is inhabited by steelhead and, to a lesser extent, both Coho and Chinook salmon. The quantities of these fish are sufficient to justify base flows tailored to the life cycles of those species.

Finding of Fact VII

As to the first issue, appropriateness of the DOE flow regime, we find as follows.

Finding of Fact VIII

Instream Flow Incremental Methodology. The respondents urged or required that Tacoma conduct a study of the by-pass reach using Instream Flow Incremental methodology (IFIM). This method is generally agreed to be the "state of the art" method for analyzing water flow as related to fish habitat. Under it, a computer modeling study is used to determine "weighted usable area" in a given length of river when flows are varied. The weighted usable

area is an indicator of fish habitat and hence fish production.

Finding of Fact X

Other factors than those considered in the IFIM study may affect fish production. Some may be flow related such as predation, competition, cover and out-migration. Some are not flow related, such as overharvest. These factors were not specifically evaluated in the setting of the base flows at issue. No empirical evidence regarding these factors was considered in setting the base flows.

A 1980 study, by Mathews and Olson, points out a relationship between stream flow and Coho salmon production in Puget Sound. Initially, studies showed a correlation between annual water runoff from western Washington streams and the commercial catch of Coho in western Washington. This correlation did not last over time, however. Later a similar correlation appeared between summer runoff and the Coho catch. These correlations, changing over time and global in their application to all streams of western Washington, do not materially impair the credibility of the specific IFIM studies conducted in the by-pass reach showing that flow reduction there indicates improved spawning habitat and, therefore, improved fish production potential.

II.

In Findings of Fact IX and XI, the PCHB found that the minimum flow regime required by the Department of Ecology in this matter is, in fact, an "enhancement" flow regime. In effect, the PCHB ruled that the minimum flow regime required by Ecology would in fact increase the amount of habitat available in the Dosewallips in the affected portion of the Dosewallips River and, consequently, fish production in the affected portion of the river.

In reaching this factual finding, the PCHB made a number of fundamental errors. First, the PCHB ignored the bulk of the evidence presented, most of it in the form of expert testimony presented on behalf of the respondent agencies, which supported the agencies' position that the Ecology minimum flow regime was just that, a *minimum* flow regime. This agency flow regime was designed and intended to protect and preserve the fishery resource in the affected portion of the river. The agencies neither intended nor did they in fact set a flow that would "enhance" fish habitat or fish production in the affected portion of the river.

Second, the PCHB mistakenly found a computer model's output (in the form of tables showing square feet of useable habitat at various flow levels) to be a true and accurate representation of actual fish habitat. As was explained repeatedly to the PCHB, the computer model's output, referred to as weighted useable area tables, is simply one indicator of the amount of physical habitat available which takes into account only three variables of habitat. The evidence presented to the PCHB strongly supports the agencies' position that weighted useable area is not the equivalent of habitat, but rather is only a crude indicator of the amount of habitat available.

In sum, after reviewing the entire record, this Court is left with a definite and firm conviction that the PCHB's factual finding that the agency flow regime is an enhancement flow regime is a mistake and is incorrect.

III.

Any Conclusion of Law deemed to be a Finding of Fact is hereby adopted as such. From these Findings of Fact, this Court now makes these

CONCLUSIONS OF LAW

The Court set forth its Conclusions of Law in the May 8, 1991, Memorandum Opinion. The Court hereby

incorporates that Memorandum Opinion, and in particular, the Conclusions of Law set forth therein.

Any Finding of Fact deemed to be a Conclusion of Law is hereby adopted as such.

From these Conclusions of Law, the Court enters the following:

JUDGMENT

The decision of the PCHB is affirmed in part and reversed in part. The PCHB's decision that the minimum flow condition required by Ecology in this matter is not preempted by federal law is hereby affirmed. The PCHB's decision that the Ecology-imposed minimum flow regime is an enhancement flow regime is hereby reversed. Finally, the PCHB's conclusion that RCW 90.54.020(3) does not allow an enhancement flow condition under the circumstances presented by this case is reversed.

DATED this 14th day of August, 1991.

/s/ Carol A. Fuller
CAROL A. FULLER
Judge

Presented by:

/s/ Jay J. Manning
JAY J. MANNING
Assistant Attorney General
Attorney for Dept. of Ecology

/s/ William C. Frymire
WILLIAM C. FRYMIRE
Assistant Attorney General
Attorney for Dept. of F & W

/s/ Mark L. Bubenik by Albert R. Malanca
MARK L. BUBENIK
Assistant City Attorney

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/s/ Albert R. Malanca
ALBERT R. MALANCA
Attorneys for City of Tacoma and
Jefferson County PUD No. 1

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APPENDIX D

IN THE SUPERIOR COURT
OF THE STATE OF WASHINGTON
IN AND FOR THE COUNTY OF THURSTON

No. 89-2-00413-2

STATE OF WASHINGTON, DEPARTMENTS OF ECOLOGY,
FISHERIES AND WILDLIFE,
Petitioners,

v.

PUD No. 1 OF JEFFERSON COUNTY and
CITY OF TACOMA,
Respondents.

PUD No. 1 OF JEFFERSON COUNTY and
CITY OF TACOMA,
Cross-Petitioners,

v.

STATE OF WASHINGTON, DEPARTMENTS OF ECOLOGY,
FISHERIES AND WILDLIFE,
Cross-Respondents.

MEMORANDUM OPINION

This matter came before the Court on cross appeals from the decision of the Pollution Control Hearings Board. The petitioners are seeking review of the Board's holding that federal law does not pre-empt the actions of the agencies, while the agencies seek review of the Board's holding that the flow levels established by the agencies

constitute an enhanced environment, and, thus, an ultra vires act.

The facts in this case are as follows. In 1982, the City of Tacoma and the PUD began planning to construct a hydroelectric project at the Elkhorn site on the Dosewallips River in Jefferson County. If approved, this project will be constructed along a 1.2 mile stretch of the Dosewallips outside the Olympic National Park. It is estimated that the project will divert up to 600 cubic feet per second (cfs). The species of fish that would be affected by the diversion are steelhead trout, and coho and chinook salmon.

To build this project, the City of Tacoma is required to obtain a license from the Federal Energy Regulatory Commission (FERC). FERC, as part of the license application process, required Tacoma to obtain a Water Quality Certificate from the Washington Department of Ecology.

In acting on the application for this certificate, the Department found that an Instream Flow, Incremental Method (IFIM) study would best assist in determining what part of the natural river flow should remain along the affected portion of the river in order to protect the fisheries presently in the river. Tacoma conducted an IFIM study during the period 1983 to 1985, and as a result of the study proposed a flow regime ranging from 65 cfs to 155 cfs, depending upon the month.

Several months later, the Department proposed its own flow regime, ranging from 100 to 200 cfs. In response, Tacoma proposed a revised flow regime ranging from 65 cfs to 170 cfs.

After considering these various proposals, the Department issued the water quality certification presently under appeal. This certification required that the minimum instream flow be maintained in accordance with the

flow regime proposed by the Department, ranging from 100 cfs to 200 cfs, depending on the month.

Tacoma appealed this decision to the Washington State Pollution Control Hearings Board. The Board held that the applicable federal statute did not preempt the Department's action in setting the minimum instream flows, but did hold that the levels set by the Department were designed to enhance the fishery, and, thus, exceeded the Department's statutory authority. The parties have cross appealed on these two issues.

I. Federal Preemption

In arguing preemption, Tacoma relies primarily on *California v. FERC*, — U.S. —, 110 S.Ct. 2024 (1990) for the proposition that FERC has superior authority to establish minimum stream flows than does the Washington Department of Ecology, while recognizing the existence of 33 U.S.C. § 1341(d), the provision relied on by the Department.

33 U.S.C. § 1341(d) provides as follows:

Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 301 or 302 of this Act [33 USCS § 1311 or 1312], standard of performance under section 306 of this Act [33 USCS § 1316], or prohibition, effluent standard, or pretreatment standard under section 307 of this Act [33 USCS § 1317], and with any other appropriate requirements of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section. (Emphasis added)

While 33 U.S.C. § 1341(d) would appear, at first reading, to permit state action to protect wildlife, *California*

v. *FERC's* holding that FERC preempts state action setting higher minimum stream flows than FERC must be examined.

California is a case where the facts are very similar to those found in the present case. The Rock Creek hydroelectric project was designed to draw water from the creek and then return it to the river slightly less than a mile away. The primary issue was who was permitted to set the minimum flow rate that must remain within the bypassed section of the creek. Initially, FERC issued a license in 1983, which set interim minimum flow rates after giving consideration to the economic feasibility and environmental effects of the project. These were set in a range of 11 cfs to 15 cfs. After study, the applicant recommended that these be adopted as the permanent rates, while the California Department of Fish and Game recommended significantly higher minimum flow rates.

In the meantime, in 1984, the state water permits were issued which set the interim minimum flow rates in conformity with the FERC rates, but reserved the right to impose higher permanent rates. In 1984 the state authority suggested that the permanent minimum flow rates should be in the range 30 cfs to 60 cfs.

Finally, after an administrative hearing FERC set the permanent minimum flow rate at 20 cfs throughout the year. Four days later the state board issued an order directing the applicant to maintain the flow rates in the range 30 cfs to 60 cfs.

The Supreme Court held that the California requirements for minimum in-stream flows cannot be given effect:

As Congress directed in FPA § 10(a), FERC set the conditions of the license, including the minimum stream flow, after considering which requirements would best protect wildlife and ensure that the project

would be economically feasible, and thus further power development. Allowing California to impose significantly higher minimum stream flow requirements would disturb and conflict with the balance embodied in that considered federal agency determination. FERC has indicated that the California requirements interfere with its comprehensive planning authority, and we agree that allowing California to impose the challenged requirements would be contrary to congressional intent regarding the Commission's licensing authority and would "constitute a veto of the project that was approved and licensed by FERC."

California, 110 S.Ct. at 2033.

Federal preemption of state law is governed by the intent of Congress.

Congressional intent to preempt state law may be found in three ways. First, Congress may express a clear intent to preempt state law. Second, the "scheme of federal regulation [may be] sufficiently comprehensive to make reasonable the inference that Congress 'left no room' for supplementary state regulation." Third, preemption will be found when there is an actual conflict between federal and state law where (1) compliance with both the federal and state law is physically impossible, or (2) the state law is an 'obstacle' to the "full purposes and objectives of Congress."

In Washington, there is a strong presumption against finding preemption. Preemption may be found only if federal law "clearly evinces a congressional intent to preempt state law", or there is such a " 'direct and positive' " conflict "that the two acts cannot 'be reconciled or consistently stand together'."

Labor & Industries v. Common Carriers, 111 Wn.2d 586, 588, 762 P.2d 348 (1988) (citations omitted).

Under the facts of the *California* case, the key fact in the decision was the fact that FERC had issued its determination of what the minimum instream flow rate would be prior to the action by the California Water Board. Under 33 U.S.C. § 1341, California would properly be found to be preempted. Here, on the other hand, it has not been shown that FERC has made a decision on what the minimum instream flow rates should be. Under 33 U.S.C. § 1341 it is clearly recognized that consideration should be given of state standards. See also 16 U.S.C. § 803(j)(1). Therefore, up to the point when FERC has made its determination, Washington has authority to determine what it considers to be necessary minimum instream flow rates. Since Tacoma has not shown that FERC has acted, preemption will not be found. The decision of the Board on this issue will be affirmed.

II. Minimum Instream Flow Rates

Judicial review of this case is under RCW 34.04.130, in as much as it was commenced at the administrative level prior to July 1, 1989. RCW 34.05.902. Under RCW 34.04.130(6),

the court may affirm the decision of the agency or remand the case for further proceedings; or it may reverse the decision if the substantial rights of the petitioners may have been prejudiced because the administrative findings, inferences, conclusions, or decisions are:

- (a) in violation of constitutional provisions; or
- (b) in excess of the statutory authority of jurisdiction of the agency; or
- (c) made upon unlawful procedure; or
- (d) affected by other error of law; or
- (e) clearly erroneous in view of the entire record as submitted and the public policy contained in the

act of the legislature authorizing the decision or order; or

(f) arbitrary or capricious

The Department asserts that the decision of the Board holding the flow rates proposed by the Department operated to enhance the existing fishery and were, thus, outside the Department's authority is either clearly erroneous or affected by other error of law.

A decision is clearly erroneous if, having reviewed the entire record and having considered the public policy behind the legislation, the court is left with the firm and definite conviction that a mistake has been committed. *Cougar Mountain Assocs. v. King County*, 111 Wn.2d 742, 765 P.2d 264 (1988). This result follows even if there is some supporting evidence for the decision. *Johns v. Employment Security*, 38 Wn.App. 566, 686 P.2d 517 (1984).

On the other hand, in reviewing under the error of law standard, the court will conduct a de novo review and may substitute its judgment for that of the agency. *Inland Empire v. Utilities & Transportation*, 112 Wn.2d 278, 770 P.2d 624 (1989).

Here the primary issue raised by this case is whether the Board was clearly erroneous in finding that the Department's proposed flow rates will enhance the natural fisheries present in the bypass portion of the river. A secondary issue is whether a flow rate that may enhance the natural fishery constitute an ultra vires action, in that it does more than preserve the natural fishery?

With respect to the primary issue, I have reviewed the entire record in this matter, and have given consideration to the public policy behind the legislation and to the arguments of counsel. This record leaves me with a firm and definite conviction that the Board erred in finding that the flow rates proposed by the Department constitute

a rate of flow which will enhance the naturally existing fishery in the Dosewallips. Since the burden of proof was on Tacoma to prove that the Department's flow rates enhanced the fishery, its failure to prove that the Department's flows did more than preserve the potential habitat existing in the river and, in fact, enhanced the natural fishery requires that the Board's decision be reversed.

Having based my decision on the first issue, it is not necessary to examine the secondary issue. However, I conclude that the Board was incorrect in concluding that a flow rate that may result in an enhancement constitutes an ultra vires action.

The statute which gives rise to this issue is RCW 90.54.020(3), which provides that

The quality of the natural environment shall be protected and, where possible, enhanced as follows:

(a) Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values and navigational values. Lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that the overriding considerations of the public interest will be served.

The Board concluded that the only base flows authorized by this statute are those "necessary to provide for the preservation of" fish, and that, since the base flows adopted by the Department enhanced the natural state of the river, these base flows exceeded the Department's authority. In so concluding, the Board limited the applicability of the prefatory phrase "and where possible, enhanced" to those situations where "paper water" existed, or where water rights had been abandoned in rivers which had been over-appropriated.

The Department argues that this portion of the statute is clear and unambiguous, should be given its plain and ordinary meaning, *State v. Theilken*, 102 Wn.2d 271, 684 P.2d 709 (1984), and that the conclusion of the Board limits the language of the Legislature in an unwarranted manner.

The Court must agree with the Department. While the situations suggested by the Board may be the most common situations when enhancement can occur, they are not the only situations. This river will have portions of its waters diverted. The question is to what degree. Since it is possible to fix a base flow that will enhance the fishery while still permitting development of the river, the Department correctly determined that it should fix a base flow that would optimize all varieties of fish in the river.

Dated this 8 day of May, 1991.

/s/ Carol A. Fuller
CAROL A. FULLER
Judge

APPENDIX E
BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

PCHB No. 86-118

IN THE MATTER of a Section 401 Water Quality Certification granted by Department of Ecology PUD No. 1 of Jefferson County and City of Tacoma

PUD No. 1 OF JEFFERSON COUNTY, AND CITY OF
 TACOMA, DEPARTMENT OF PUBLIC UTILITIES,
Appellants,

v.

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY
Respondent,
 and

STATE OF WASHINGTON DEPARTMENT OF WILDLIFE
 DEPARTMENT OF FISHERIES
Intervenors.

**REVISED FINAL FINDINGS OF FACT,
 CONCLUSIONS OF LAW AND ORDER**

This matter is the appeal of base flows contained within a Water Quality Certification, granted by respondents with respect to a hydroelectric proposal by appellants.

The matter came before the Pollution Control Hearings Board, Wick Dufford, Chairman, Lawrence J. Faulk, Member, and Judith A. Bendor, Member. William A. Harrison, Administrative Appeals Judge presided.

The hearing was conducted at Lacey, Washington, on December 15, 16, 17 and 18, 1988.

Appellants appeared by Mark L. Bubenik, Assistant City Attorney for Tacoma. Respondent, State Department of Ecology appeared by Jay J. Manning, Assistant Attorney General. Respondent Intervenors State Departments of Wildlife and Fisheries appeared by William C. Frymire, Assistant Attorney General. Reporter, Gene Barker and Associates provided court reporting services. Respondent elected a formal hearing pursuant to RCW 43.21B.230.

Witnesses were sworn and testified. Exhibits were examined. Closing Briefs were filed on February 4, 1988. From testimony heard and exhibits examined, the Pollution Control Hearings Board issued a decision on June 29, 1988, with a dissent, following. The respondents filed a Petition for Reconsideration. Appellants filed a Memorandum in Opposition. A copy of the transcript was filed. Board Member Harold S. Zimmerman has reviewed the record. After reconsideration, the Board issues this revised decision:

FINDINGS OF FACT

I

This matter concerns the Dosewalips [sic] River on the Olympic Peninsula of Washington.

II

Appellants (hereafter Tacoma) propose to construct a hydroelectric project on the Dosewalips River. The project would consist of a weir which would divert water into a pipeline that parallels the course of the river but initially remains somewhat level as the river descends downstream. At the downstream end of the pipeline, water would fall through a generator and then be discharged back into the river.

III

The effect of Tacoma's project would be to reduce the river flow in the segment of the Dosewalips River paralleled by the pipeline. That segment of the river is fairly steep and canyon-like. The natural flows through this "bypass reach" are vigorous during most of the year. These natural flows are essentially undiminished by appropriation at present.

IV

Tacoma's hydroelectric proposal must be licensed by the U.S. Federal Energy Regulatory Commission (FERC). Under Section 401 of the Federal Clean Water Act the respondent, Washington State Department of Ecology (DOE) must certify compliance with state water quality requirements. We have previously ruled that such a certification may include base flow limitations in the by-pass reach of the Dosewalips River pursuant to RCW 90.54.020(3)(a) of the State Water Resources Act, of 1971. See "Order Granting Cross Motion for Summary Judgment" entered April 10, 1987.

V

The base flows for the by-pass reach of the Dosewalips, as contained in DOE's Section 401 Water Quality Certification, were appealed by Tacoma. The notice of appeal was filed before us on July 11, 1986. Following pre-hearing motions, the issues remaining for hearing were reduced to the following:

1. Whether the specific base flows imposed by DOE in this instance are appropriate for the preservation of the fishery resource and related values?
2. What quantity and type of fish inhabit the waters to be affected by the base flows prescribed by DOE?

VI

Taking the second issue first, we find that the by-pass reach is inhabited by steelhead and, to a lesser extent,

both Coho and Chinook salmon. The quantities of these fish are sufficient to justify base flows tailored to the life cycles of those species.

VII

As to the first issue, appropriateness of the DOE flow regime, we find as follows.

VIII

Instream Flow Incremental Methodology. The respondents urged or required that Tacoma conduct a study of the by-pass reach using Instream Flow Incremental methodology (IFIM). This method is generally agreed to be the "state of the art" method for analyzing water flow as related to fish habitat. Under it, a computer modeling study is used to determine "weighted usable area" in a given length of river when flows are varied. The weighted usable area is an indicator of fish habitat and hence fish production.

IX

The respondents regard spawning as the limiting factor in fish production within the by-pass reach. The IFIM data show that when the natural, vigorous flow of river in the by-pass reach is decreased, spawning habitat actually improves. The base flows in this matter were set by selecting, in each month where spawning occurs, that flow¹ which produces 100% of the weighted usable

¹ The optimum fish flow adopted in this matter was deemed consistent, in testimony from the Department of Wildlife, with the following Department of Wildlife draft policy on instream flow:

Minimum instream flows are flows which maximize habitat for flow-dependent fish and wildlife; minimum flows are not less than optimum flows. Any reduction of flow below minimum instream flow reduces habitat. Additional flow above minimum instream flow does not increase habitat. Natural flows are sometimes less than minimum instream flow, but any prolonging of natural, subminimum instream flow will adversely impact fish and wildlife.

area using the IFIM data. This constitutes an optimum flow regime for fish where, as here, spawning is the factor limiting further fish production. Moreover, this also constitutes a flow regime which, for fish, is potentially superior to that provided by the natural flow of the Dose-walips River in the by-pass reach.

X

Other factors than those considered in the IFIM study may affect fish production. Some may be flow related such as predation, competition, cover and out-migration. Some are not flow related, such as overharvest. These factors were not specifically evaluated in the setting of the base flows at issue. No empirical evidence regarding these factors was considered in setting the base flows.

A 1980 study, by Mathews and Olson points out a relationship between stream flow and Coho salmon production in Puget Sound. Initially, studies showed a correlation between annual water runoff from western Washington streams and the commercial catch of Coho in western Washington. This correlation did not last over time, however. Later a similar correlation appeared between summer runoff and the Coho catch. These correlations, changing over time and global in their application to all streams of western Washington, do not materially impair the credibility of the specific IFIM studies conducted in the by-pass reach showing that flow reduction there indicates improved spawning habitat and, therefore, improved fish production potential.

XI

Tacoma has proposed base flows, using the same IFIM data, that were not accepted by DOE. Tacoma's proposed base flows were selected to equal or exceed the weighted useable area provided by the natural flow of the river for all life cycles of the fish species at issue. The existing, natural flow of the river was deemed by Tacoma to be the "50% exceedence flow" in the IFIM data. This

is the median daily flow meaning half the time daily flows are more and half the time daily flows are less. Tacoma's proposed base flows provide weighted usable area equaling or exceeding that provided by the existing natural flow as depicted by the 50% exceedence flow. A summary of pertinent flows is as follows:

Month	Existing (50% Exceedence flow) (CFS)	DOE Base Flow_ (CFS)	Tacoma's Proposed Base Flow (CFS)
Jan.	340	140	100
Feb.	302	100	75
March	325	200	145
April	408	200	130
May	689	200	105
June	738	200	105
July	448	200	90
Aug.	222	200	170
Sept.	159	150	150
Oct.	149	140	140
Nov.	285	140	95
Dec.	397	140	75*

Although additional data might present a more nearly representative picture, we find that the 50% exceedance flow is an appropriate indicator of the existing flow conditions in the river. Because reduction in flows improves fish habitat to a point where further reductions reverse the trend, the IFIM data shows that existing flow and Tacoma's proposed base flows have similar habitat value while DOE's base flow has habitat value greater than either. Respondents have not made any independent determination of existing fish habitat value in setting the DOE base flow.

* Initially proposed as 65 CFS this flow was the subject of testimony at hearing during which Tacoma stipulated to the higher flow proposal to protect egg incubation.

XII

Any Conclusion of Law deemed to be a Finding of Fact is here by adopted as such. From these Findings of Fact, the Board makes these

CONCLUSIONS OF LAW

I

Base flows in perennial rivers of the state are prescribed and authorized by the State Water Resources Act of 1971, Chapter 90.54 RCW. In pertinent part, that act provides at RCW 90.54.020 as follows:

90.54.020 General declaration of fundamentals for utilization and management of waters of the state

Utilization and management of the waters of the state shall be guided by the following general declaration of fundamentals:

(1) Uses of water for domestic, stock watering, industrial, commercial, agricultural, irrigation, hydroelectric power production, mining, fish and wildlife maintenance and enhancement, recreational, and thermal power production purposes, and preservation of environmental and aesthetic values, and all other uses compatible with the enjoyment of the public waters of the state, are declared to be beneficial.

(2) *Allocation of waters among potential uses and users shall be based generally on the securing of the maximum net benefits for the people of the state. Maximum net benefits shall constitute total benefits less costs including opportunities lost.*

(3) The quality of the natural environment shall be protected and, where possible, enhanced as follows:

(a) *Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. Lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest will be served.*

(b) Waters of the state shall be of high quality. Regardless of the quality of the waters of the state, all wastes and other materials and substances proposed for entry into said waters shall be provided with all known, available, and reasonable methods of treatment prior to entry. Notwithstanding that standards of quality established for the waters of the state would not be violated, wastes and other materials and substances shall not be allowed to enter such waters which will reduce the existing quality thereof, except in those situations where it is clear that overriding considerations of the public interest will be served. (*Emphasis Added.*)

II

Tacoma first urges that base flows may not be set at levels which provide the optimum flow regime for fish. We agree. In *Northwest Steelhead and Salmon Council, et al. v. State Department of Ecology, et. al.*, PCHB 81-148 (1983) we concluded that base flows represent a statutory allocation for the environment to be taken out before the maximum net benefits formula is applied. In that case, however, the base flows adopted by DOE were below the optimum for fish. We concluded that flows in excess of the base flow were subject to the maximum net benefits rule, thereby potentially including flows which would be the optimum for fish. We held that:

"The maximum net benefits requirement of the WRA [Water Resources Act] does not guarantee the optimum flows for fish, nor guarantee that existing fish habitat will be enhanced. Neither does it guarantee that all flows in excess of instream [base] flows shall be available for diversion. Rather, it calls for the balancing of competing, beneficial uses." *Northwest Steelhead, supra*, at Conclusion of Law IX, p. 16. [Brackets added.]

This balancing of competing, beneficial uses applies only to the marginal flow above the base flow, and not to the base flow itself. Yet if, as here, the optimum flow regime for fish is adopted as the base flow, that optimum fish flow is guaranteed without any portion of it being subjected to the maximum net benefits test. This is not consistent with DOE's earlier adoption of base flow in *Northwest Steelhead, supra*, nor with our holding therein.

Moreover, the adoption of optimum fish flows as base flow leaves barren the statutory admonition that water uses, which by RCW 90.54.020(1) includes fish maintenance and enhancement, shall be allocated under the maximum net benefit rule of RCW 90.54.020(2). While, as DOE urges, the maximum net benefit rule applies only to "potential" uses, that limitation would exclude only certain maintenance flows, such as those adopted by DOE as base flows in *Northwest Steelhead, supra*. By contrast, the optimum fish flows adopted in this case introduce the potential for enhanced fish use in competition with the potential hydroelectric use, while impermissibly dispensing with the statutory maximum net benefits test.

The optimum fish flows adopted as base flows by DOE in this matter are inconsistent with RCW 90.54.020(2) in that the incremental portion of these flows constituting fish habitat enhancement were not subjected to a maximum net benefit test.

III

The optimum fish flows adopted as base flows by DOE are also inconsistent with the statutory authorization for base flows. Base flows, as authorized at RCW 90.54.020(3)(a), are those "necessary to provide for preservation of" fish and related values. The term "preservation" is not specifically defined, nor ambiguous. Words in a statute should be given their ordinary meaning absent ambiguity or statutory definition. *Garrison v. State Nursing Board*, 87 Wn. 2d 195, 550 P. 2d 7 (1976). Dictionaries may be used to ascertain the common meaning of statutory language. *Garrison, supra*; *East v. King County*, 22 Wn. App. 247, 589 P2d 805 (1987). The term "preservation" means "the act of preserving" while the root word "preserve", means "to keep safe from injury, harm or destruction". *Webster's Third New International Dictionary*, 1974 (1971). The evidence in this matter is that the optimum fish flows adopted as base flows enhance fish habitat beyond that provided by the river in its natural state. This is inconsistent with the statutory plan that base flows "keep safe" or preserve the fish habitat, rather than enhance it.

IV

Respondent, DOE, urges that it may enhance fish habitat through base flows because of the prefatory wording of RCW 90.54.020(3) which states:

The quality of the natural environment shall be *protected* and, *where possible, enhanced* as follows:
... (Emphasis added.)

The "preservation" language for base flows then follows at RCW 90.54.020(3)(a) as do the requirements for wastes proposed for entry into the water at RCW 90.54.020(3)(b). The prefatory wording provides that the environment shall be "protected" in all cases. The word

"protect" means "to cover or shield from that which would injure or destroy or detrimentally affect. *Webster's, supra*, 1822. Thus the term "protected" is kindred in meaning to the term "preservation" applicable to base flows. By contrast, the word "enhance" means "advance, elevate, augment, heighten or increase". *Webster's, supra*, 753. The key to understanding this prefatory wording is that while it uses the terms "protected" and "enhanced", which are distinguishable from one another, it provides for protection in all cases but provides for enhancement only "where possible".

Here it is noteworthy that the Water Resources Act of 1971, Chapter 90.54 RCW, was enacted relatively recently in the history of Washington water law. At the time of its enactment, many rivers and streams had long been subject to appropriations diverting their waters for various uses. Thus while the base flows were intended to "protect" all rivers, some were already over-appropriated to meager flow levels by 1971. In *Northwest Steelhead, supra*, summer flows in the Green River had been reduced by pre-1971 appropriations to low levels. In that matter, DOE adopted a base flow which exceeded the actual flow in the river at low summer levels. The amount by which base flow exceeds actual flow is sometimes referred to as "paper water" in recognition of the fact that it exists only on paper and not in real life. Yet the worthwhile object of establishing "paper water" is that when in the future, existing appropriators may abandon or forfeit their water rights the associated waters can be devoted to filling out the base flow, and thereby remain in the river. In this fashion the quality of a river already degraded by over-appropriation when the base flow legislation was enacted can be "enhanced" by base flows. This is the situation contemplated by the prefatory language in calling for enhancement "where possible". The matter at hand, however, is not that sit-

uation. Rather, the river at issue is flowing in its essentially natural state. Its fish producing potential may be preserved at this natural level through the adoption of base flows. But unlike a river degraded by over-appropriation, this river, in its natural state, may not be subjected to base flows calculated to enhance its natural productivity. Were that not the case, the phrase "where possible" used in connection with "enhanced" would be deprived of meaning along with the terms "protected" and "preservation". Base flows would then be wrongly understood to be enhancement flows in all instances.

We conclude that the base flows at issue enhance the fish producing potential of a river flowing in its essentially natural state, and are therefore inconsistent with RCW 90.54.020(3)(a) limiting base flows to those necessary "to provide for preservation" of fish.

V

Tacoma has shown that its proposed base flows (*see* Finding of Fact XI, above) will probably preserve the fish habitat and productivity now provided by the by-pass reach flowing in its natural state. These base flows therefore represent the correct application of RCW 90.54.020(3)(a) to the facts of this case.

VI

Other matters than fish preservation made pertinent to base flows by RCW 90.48.020(3)(a) are not, in this case, sufficient to sustain the base flows adopted by DOE nor sufficient to justify base flows greater than those proposed by Tacoma.

VII

As we have concluded earlier, base flows are only a first step in determining the ultimate allocation of water between competing uses. Nothing herein precludes the ultimate allocation of flows greater than the base flow for fish enhancement. If respondents pursue such a course

under state law, the maximum net benefits test of RCW 90.54.020(2) would apply to flows greater than base flows. If respondents pursue such a course under federal law in FERC proceedings, nothing herein is intended to indicate whether base flows are the maximum flows which ought to be allocated to fish productivity.

VIII

In reaching our conclusions in this case, we do not render any view as to whether state law should mandate, without consideration of other water uses, 1) enhancement flows to optimize fish productivity or 2) base flows necessary to preserve fish productivity. We hold only that the latter is all the state law now requires—leaving additional allocations for fish to a balancing process. Whether the law should be retained in its present form or changed is a broad question of policy properly addressed to the legislature.

IX

Any Finding of Fact deemed to be a Conclusion of Law is hereby adopted as such. From these Conclusions of Law, the Board enters this

ORDER

The base flows within the water quality certification are hereby vacated. This matter is remanded for reissuance of the water quality certification in accordance with this decision.

DONE at Lacey, WA this 25th day of January, 1989.

POLLUTION CONTROL HEARINGS
BOARD

/s/ Wick Dufford
WICK DUFFORD
Chairman

/s/ Harold S. Zimmerman
HAROLD S. ZIMMERMAN
Member

(Dissent)
JUDITH A. BENDOR
Member

/s/ William A. Harrison
WILLIAM A. HARRISON
Administrative Law Judge

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

PCHB No. 86-118

PUD No. 1 OF JEFFERSON COUNTY
and CITY OF TACOMA,

Appellants,

v.

STATE OF WASHINGTON, DEPARTMENT OF ECOLOGY,
DEPARTMENT OF FISHERIES and
DEPARTMENT OF WILDLIFE,

Respondents.

REVISED DISSENTING OPINION

The Water Quality Certification issued by the Department of Ecology ("DOE") conforms to the requirements of state law to establish base flows and should be AFFIRMED. Therefore, I dissent.

This is a simple case about what constitute adequate minimum monthly flows to preserve fish habitat in the Dosewallips River. The revised majority opinion places an insupportable reliance on a limited mathematical model, derived from only one wateryear, to determine habitat, and ignores a range of critical real-world habitat factors. Moreover, the opinion erroneously concludes that DOE's optimization of flows for *one* fish species at the spawning life stage constitutes "enhancement" of habitat for *all* fish. In light of all the evidence, the opinion effectively and improperly shifts the burden from appellants to prove that DOE's base flows are in error, onto respondent DOE to prove their base flows are correct.

In sum, the opinion is fatally flawed.

I

The Dosewallips is a river of unique beauty, with its headwaters flowing from the high glacial peaks of the eastern Olympic Mountains in the Olympic National Park. After flowing through the Park, and national forest and private lands, it empties into deep Hood Canal. The River is an important asset to the State of Washington, supporting wild and pen-reared runs of sea-run steelhead, as well as coho and chinook salmon in the upper portions, and pink and chum salmon in the lower, flatter reaches of the River. Parts of the upper River are steep, with cascades, deep plunge pools and riffles. Upstream, above the proposed project, there is an impassable waterfall preventing fish from migrating beyond. Because of the snow and glacial runoff, the River's flows fluctuate widely from month to month and from year to year.

Because the uppermost origins of the River are within the National Park, the River's water quality is significantly protected. This is a situation increasingly rare among the watersheds and waters of Washington State and specifically Hood Canal. The River is under study for possible inclusion in the Wild and Scenic Rivers List.

II

The proposed hydroelectric project consists of a diversion dam, a penstock (very large pipe), and a powerhouse. At the dam, 50 to 600 cubic feet per second ("cfs") of water from the River would be removed from a 1.2 mile stretch of the River, (between River Miles 13.8 and 12.6), in a fairly steep section known as the "bypass reach". The diverted water would flow through the penstock in a tunnel to the powerhouse where electricity would be generated.

The project does not include any storage capacity, so flows in excess of 600 cfs, the project's capacity, would

not be diverted and would remain in the River and complement any required base flows. Conversely, because of engineering constraints, when the River's flows are less than 50 cfs plus that month's required base flows, no removal of water would occur. However, at flows of 51 cfs plus base flows, all 50 cfs could be diverted, resulting in abrupt River flow changes during low flow periods.¹

The key disputed issue in this case is: what are the base flows that must be left in the River's bypass reach in order to preserve the fish?

III

DOE issued the Water Quality Certification allowing PUD No. 1 of Jefferson County and the City of Tacoma to withdraw from 50% to 90% of the River's flows, depending upon the month. By no stretch of the imagination can DOE's action, leaving in the River only 50% to 10% of the flows, be properly characterized as leaving the River in a wild state. In rebuttal, appellants propose to remove 95% of the River's flows in *all months* except September and October. (See Attachment One.)

IV

To determine what flows are required to satisfy the fish preservation base flow requirements of RCW 90.54.020(3)(a), both the DOE and appellants utilized, to varying degrees, a mathematical model known as PHABSIM (hereafter "model") in an effort to calculate fish habitat. The model is in the early developmental stages. The mathematical results were then interpreted by DOE using experts' professional judgment to derive

¹ Additional engineering constraints *may* limit such diversions, to avoid having to frequently turn the turbines on and off. However, no evidence has been presented further delineating such constraints.

base flow figures that preserve habitat. This total evaluation process is known as IFIM (hereafter "evaluation"). A basic assumption was made by all parties that preservation of habitat in fact preserved fish. Such assumption does not account for other non-flow related preservation factors, such as overfishing.

V

A stretch of the River within the bypass was chosen for PHABSIM modeling purposes. Only three physical variables were measured: water velocity, water level, and substrate (composition of the bottom). Only one set of river velocity speeds were measured and used in the model, rather than the customary three. The model then attempted to quantify habitat under different proposed flows, resulting in a number known as "weighted usable area" ("WUA"). These WUA numbers are intended to be *indicators* of habitat. Appellants' case consisted of only one witness, who conceded that the Dosewallips is "a very difficult stream" to model.

VI

The model has not been tested to determine its accuracy range or the magnitude of risk inherent. Moreover, the model cannot even compute habitat when flows exceed 600 cfs, which occurs regularly in the Dosewallips. In addition, for fish fry life stages, the model is very unreliable, attempting to dry-up the River.

The model did *not* include other important flow-related factors which are essential elements of habitat, including: predation, competition and territoriality, sedimentation and the effect on eggs and food supplies, the adequacy of flows to prevent eggs from dehydrating, and the creation of barriers to migration. A properly conducted determination of base flows for fish preservations must consider these other factors, even if the factors have not been

individually numerically quantified.² The model's numerical results must be cross-checked with real-life requirements. Unfortunately, the other opinion largely adopts these bare-bones numerical results "whole cloth".

VII

The Dosewallips River, as it currently flows undammed, provides excellent habitat for steelhead and salmon. The fish have evolutionarily adapted over the millenium to this River with its dynamic changes in flow. The following brief background on fish lifecycles provides a basis for understanding why different flows during the year are critical.

Sea-run steelhead enter the River in winter and early spring, spawning in the River in the spring. The eggs hatch and the fry and juveniles rear in the River for two years, whereupon they migrate downstream to rear in the ocean for about one and a half years before returning to spawn. Adult chinook salmon in the Dosewallips consist of spring and fall runs, with the former entering the River in April to June, staying in the River until they spawn in August-September. Fall run chinook enter in August through September and spawn in December. Their young stay in the River for about one year, before migrating to the ocean. Adult coho salmon enter the River as early as August to spawn, coincident with high flow events such as glacial runoff.

The eggs are laid in gravel in a minimum of six inches of water. With as little as 15 minutes exposure to air, eggs dry-out and de-water. This dehydration causes significant egg mortality.

² No party has done a *quantitative* baseline study for such factors. All parties concede such study would be very expensive, take many years to complete, and is not practical to do. Therefore, experts' judgments were used.

VIII

The type of habitat suitable for steelhead and salmon differs depending upon the particular life stage. Under natural conditions several life stages of fish exist in the River at the same time.

When issuing a Water Quality Certificate which allows diversion of a river's flow, given the variety of *concurrent* habitat demands, an expert determination has to be made as to *which life stage* is most flow-sensitive. That life stage is then "optimized" using the WUA habitat indicators.

All parties engaged in "optimization". DOE correctly used the spawning stages for such optimization.³ In contrast, where choices had to be made, appellants optimized for juvenile rearing.

IX

Appellants used a statistical river flow at the "50% Exceedance" level based on only one water-year, (1931-32), to derive the weighted usable area habitat indicators. Appellants erroneously concluded that such habitat indicators alone constitute "existing habitat" for purposes of base flow determination. The other opinion erroneously adopts appellants' methodology.

The 50% Exceedance ("50% E") flow is a statistical figure which the Federal Energy Regulatory Commission requires be used for hydroelectric permit applications. 50% E is also a calculation in harmony with engineering/design criteria. However, there is little credible testimony in this proceeding that the 50% E flow levels are in fact grounded in the biological habitat requirements of fish.

In addition, appellants' 50% E levels were based on 1931-32 *median* flow figures, that is: half the time in a

³ In February, when there is no spawning stage, DOE used the juvenile rearing stage.

given month in 1931-32 the flows exceeded that statistical level, and half the time they were less. In the real world, there can be a vast difference in flow levels between 50% E median flows and average (*mean*) flows, e.g., in one month 210 cfs was the median, whereas 800 cfs was the mean. In this project, appellants' base flows will reduce in-stream flows to the 95% E level; 95% of the time the in-stream flows remaining in the bypass would be less than the 1931-32 *median* flows.

X

The Washington Department of Ecology, three resource agencies—Washington State Departments of Game and of Fisheries, and the U.S. Fish and Wildlife Service—and the Indian Point No Point Treaty Council, all determined that the model-derived 50% E median flows based solely on one water-year did not sufficiently measure real-life existing habitat in the dynamic Dosewallips River. There was abundant evidence of the incorrectness of appellants' choice of solely 1931-32, one year for modeling, and their use of median figures. The other opinion's cryptic approval (at Finding of Fact XI) essentially ignores the evidence.

XI

During the evaluation stage, in addition to optimizing for the fry life stage, DOE and the other resource agencies evaluated other habitat factors in deriving the base flows.

At all life stages fish are subject to predation. When confined to less water due to lower flows, i.e., both less area and less depth, predation is likely to be enhanced and fish losses increased. Lower flows also provide less protection by decreasing the cover provided by bubbles, making the fish more visible.

With the decrease in flows, the fish are confined to smaller areas when competing for spawning territory and

for food. The abundance of a variety of food prey, including insects, is related to flow. In addition, as stream temperatures increase during the year, fish metabolism increases, as does food consumption, thereby heightening territorial conflicts resulting from lower flows.

With less flow and water velocity, water-borne sediments are deposited onto the substrate at higher rates, increasing the risk of smothering eggs and harming prey organisms. The greatest significant increase in sediment deposit occurs during intermediate flows.

At the present time, prior to diversion, there are no known barriers to fish upstream migration below or through the Dosewallips bypass reach. Decreased flows have the likely potential to create barriers by not providing sufficient water for fish to leap upstream.

Appellants' base flows rely solely on the model, and did not account for these significant habitat factors.

X [sic]

The Department of Ecology correctly exercised their responsibility to evaluate the model numbers, determined which life stage is most flow-dependent, and further evaluated real-world habitat factors in determining base flows. The Department did so in conjunction with numerous experts from several resource agencies, both state and federal. Appellants' sole witness did not prove that the Department of Ecology's base flows do more than preserve potential habitat. To the contrary, their sole witness testified that he could not conclude that the DOE base flows would enhance fish production.

Appellants have clearly not sustained their legal burden.

XI [sic]

The Water Quality Certification provides for base flows to preserve fish production potential in conformance with

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RCW 90.54.020(3)(a). Therefore, no maximum net benefits test need have been performed. Appellants have failed to prove that these are enhancement flows.

The Department of Ecology's base flows should be **AFFIRMED**.

DONE this 25th day of January, 1989.

/s/ Judith A. Bendor
JUDITH A. BENDOR,
Member

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Attachment One

Month	Existing	DOE Base Flow	Tacoma's Proposed Base Flow
	(50% Exceedence flow)		
	(CFS)	(CFS)	(CFS)
Jan.	340	140	100
Feb.	302	100	75
March	325	200	145
April	408	200	130
May	689	200	105
June	738	200	105
July	448	200	90
Aug.	222	200	170
Sept.	159	150	150
Oct.	149	140	140
Nov.	285	140	95
Dec.	397	140	75*

* Initially proposed as 65 CFS this flow was the subject of testimony at the hearing during which Tacoma stipulated to the higher flow proposal to protect egg incubation.

APPENDIX F

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

PCHB No. 86-118

PUD No. 1 OF JEFFERSON COUNTY and
CITY OF TACOMA,

Appellants,

v.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY,
Respondent.

ORDER DENYING SECOND MOTION FOR
SUMMARY JUDGMENT

On November 3, 1987, appellant City of Tacoma filed its Second Motion for Summary Judgment, together with Memorandum in Support, and Supplemental Memorandum in Support with attachment (*Rock Creek Limited Partnership*).

On November 13, 1987, respondent Department of Ecology filed its Second Cross Motion for Summary Judgment and Memorandum in Support.

On November 18, 1987, City of Tacoma filed a further attachment to its Supplemental Memorandum (*Rock Creek Limited Partnership—Order Denying Rehearing*).

Having considered these together with the file herein and being fully advised, the Board finds that there is no genuine issue of material fact and that pursuant to WAC 371-08-031(2) of the Board's procedural rules and CR

56, appellant's second motion for summary judgment should be denied and respondent's second cross motion for summary judgment should be granted.

In these second motions the undisputed facts are the same as in the first motions disposed of by our Order entered April 10, 1987, and our Order following request for reconsideration entered May 26, 1987.

Appellant's second motion reiterates arguments concerning state laws which were advanced previously and disposed of by prior Orders.

Appellant's second motion also advances a Declaratory Order of the Federal Energy Regulatory Commission entitled, *Rock Creek Limited Partnership Project* No. 3189-014. This holds that a water appropriation permit granted by California under state law and containing minimum flow limitations is pre-empted by the provisions of the Federal Power Act. That matter is distinguishable from this case where the issue concerns a certification provided by another federal statute (Clean Water Act, Section 401), rather than state law. Both the reasoning and conclusion of *Rock Creek* are inapposite to this appeal.

Wherefore the Board enters this

ORDER

Appellant City of Tacoma's Second Motion for Summary Judgment is denied. Respondent Department of Ecology's Second Cross Motion for Summary Judgment is granted.

DONE at Lacey, WA, this 9th day of December, 1987.

POLLUTION CONTROL HEARINGS
BOARD

/s/ Wick Dufford
WICK DUFFORD
Chairman

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/s/ Lawrence J. Faulk 12/8/87
LAWRENCE J. FAULK
Member

/s/ Judith A. Bendor
JUDITH A. BENDOR
Member

/s/ William A. Harrison
WILLIAM A. HARRISON
Administrative Appeals Judge

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APPENDIX G

**STATE OF WASHINGTON
ENVIRONMENTAL HEARINGS OFFICE**

April 10, 1987

Mark L. Bubenik
Assistant City Attorney
City of Tacoma
Department of Public Utilities
Tacoma, Washington 98411

Jay J. Manning
Assistant Attorney General
Department of Ecology
Mail Stop: PV-11
Olympia, WA 98504

Counselors:

Re: PCHB No. 86-118
PUD #1 OF JEFFERSON COUNTY & CITY OF TA-
COMA UTILITIES DEPARTMENT V. DOE

Enclosed is the Board's "Order Granting Cross Mo-
tion for Summary Judgment."

This is a FINAL ORDER for purposes of appeal pur-
suant to WAC 371-08-220.

Very truly yours,

/s/ William A. Harrison
WILLIAM A. HARRISON
Administrative Appeals Judge

WAH:tr
Enclosure

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

No. 86-118

IN THE MATTER of a Section 401 Water Quality
Certification granted by Department of Ecology
to PUD No. 1 of Jefferson County and
City of Tacoma

PUD NO. 1 OF JEFFERSON COUNTY, and
CITY OF TACOMA, DEPARTMENT OF
PUBLIC UTILITIES,
Appellant,

v.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY,
Respondent.

ORDER GRANTING CROSS MOTION
FOR SUMMARY JUDGMENT

Having considered the following:

1. City of Tacoma's Motion for Summary Judgment filed December 12, 1987, together with Exhibits A, B and C and affidavits of Messrs. Philip Hilgert and Eugene Welch and Tacoma's Memorandum filed therewith.
2. Statement of Additional Authorities filed January 24, 1987, by the City of Tacoma.
3. State Department of Ecology's Cross Motion for Summary Judgment filed January 28, 1987, together with Memorandum and affidavits of Messrs. Brad

Caldwell, Walter Bergstrom, Kenneth J. Bruya, and Hal Beecher.

4. City of Tacoma's Memorandum in Reply to DOE's Memorandum in Opposition, filed February 4, 1987.

and having considered the file herein and being fully advised, the Board finds that there is no genuine issue of material fact and that pursuant to WAC 371-08-031(2) of the Board's procedural rules and CR 56, summary judgment should be granted.

The undisputed facts are as follows:

1. Appellants, Jefferson County Public Utility District No. 1 and the City of Tacoma, seek to develop a new hydroelectric power facility on the Dosewallips River of the Olympic Peninsula in Washington State.

2. Appellants must first obtain a federal license from the Federal Energy Regulatory Commission before proceeding to develop the hydroelectric facility.

3. Because the development requires a federal license, appellants must secure from the State of Washington a "water quality certification". The requirement to obtain such a certification is found within the federal Clean Water Act at Section 401 (codified as 33 U.S.C., Sec. 1341).

4. The appellants requested the Section 401 water quality certification from the state agency responsible for considering such requests, the Washington State Department of Ecology (DOE).

5. In making their request for Section 401 water quality certification, appellants described to DOE the nature of their proposed, new hydroelectric facility. It is not a traditional dam arrangement. Rather, it is a "run of the river" proposal in which water would be diverted from the Dosewallips and run through a long pipe ("penstock") running parallel to the river and downstream for

a little over one mile. The penstock, however, would remain at a relatively constant elevation while the river drops steeply below. The penstock, at its downstream end, then drops abruptly forcing its water through a power house from which the water then re-enters the river. Thus there would be some degree of "de-watering" within the one mile stretch of the river bypassed by the penstock.

6. The Dosewallips River supports a salmon and steel-head fishery. These fish presently inhabit the by-pass reach.

7. The Dosewallips River derives its origins in the high Peaks of the Olympic Range within the Olympic National Park. After flowing its course through wooded highlands it descends to discharge its waters to the Hood Canal. It is an important scenic asset of the State of Washington.

8. On June 11, 1986, DOE granted appellants request by issuing a Section 401 water quality certification. This contained a limitation, however, to which appellants object and which forms the basis of their appeal now before us. The limitation states:

5. A *State Water Right Permit* (Chapters 90.03.250 RCW and 508-12 WAC) must be obtained prior to commencing construction of the project. As a condition of this water quality certification, the project must comply with the stream flow requirements as set forth below:

January	140	cfs	or	natural flow
February	100	cfs	or	natural flow
March	200	cfs	or	natural flow
April	200	cfs	or	natural flow
May	200	cfs	or	natural flow
June	200	crs [sic]	or	natural flow
July	200	cfs	or	natural flow
August	200	cfs	or	natural flow
September	150	cfs	or	natural flow
October	140	cfs	or	natural flow
November	140	cfs	or	natural flow
December	140	cfs	or	natural flow

While these flows are in excess of those required to maintain water quality in the bypass region, they are the flows recommended by the resource agencies and tribes for maintaining sufficient flows for the fishery resource. They are included herein as a matter of cooperatin [sic] with these other agencies.

9. Appellants contend that DOE has exceeded its statutory authority in placing this limitation [sic]. The DOE contends that it has not.

From which the Board reaches the following conclusions:

1. The Section 401 water quality certification which appellants need from the state to proceed must certify that the discharge will comply with Sections 301, 302, 303, 306 and 307 of the federal Clean Water Act. These sections deal, so far as pertinent here, with what are known as "water quality standards" and the "effluent limitations" necessary to meet those standards.

2. Water quality *standards* have been promulgated by the state, with federal overview, under federal and state clean water acts. These standards are published at chapter 173-201 WAC and concern such things as fecal coliform, dissolved oxygen, dissolved gas, temperature, pH and other micro-characteristics. Similarly, effluent limitations are imposed by the permit system published at chapter 173-220 WAC and concern the same micro-characteristics.

3. In this matter, appellants assert that the base flow limitation in question is not justified by reference to water quality *standards* or effluent limitations. We do not understand DOE to take issue with this. See, for example, the affidavit of Mr. Walter Bergstrom who swears that in writing the words:

"... these flows are in excess of those required to maintain water quality in the bypass region . . ."

he meant and was referring to water temperature. Page 2, Lines 1-13. Water temperature is among the charac-

teristics for which there is a water quality standard, WAC 173-201-045(1)(c)(iv). We conclude that the base flow limitation in question is not supported by, nor intended to be supported by, water quality standards.

4. There is more, however, to Section 401, than certifying compliance with water quality standards or effluent limitations. Within subsection (d) of Section 401 it states:

(d) Limitations and monitoring requirements of certification

Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 1311 or 1312 of this title, standard [sic] of performance under section 1316 of this title, or prohibition, effluent standard, or pretreatment standard under section 1317 of this title, and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.

(Emphasis added).

5. In interpreting the meaning of the statutory phrase "any other appropriate requirement of State law" we embrace with approval the interpretation taken by the Oregon Court of Appeals in *Arnold Irrigation District v. Department of Environmental Quality*, 79 Or. App. 136, 717 P.2d 1274 (1986) cited by the parties:

"Congress did not make the section 1313 [water quality] standards the exclusive water quality criteria which the states may use in placing limitations on section 1341 [water quality] certificates. If Congress had intended to do so, it could have specifically

mentioned those standards in section 1341(d) [quoted at conclusion 4. above], but it did not. Rather, it allowed the states to enforce *all* water quality—related statutes and rules through the states' authority to place limitations on section 1341 [401] certificates." P.1279 [Wording in brackets added]. *Emphasis in original.*

We see nothing in *Power Authority v. Department of Environmental Conservation* 379 F. Supp. 243 (1974), cited by appellant, which is at variance with the conclusion from *Arnold*, above. *Power Authority*, in language emphasized at page 6 of appellant's memorandum, merely memorializes the well known authority of states to adopt more restrictive standards than the federal Clean Water Act provides. This does not bear upon the distinction between technical water quality standards and other forms of state water quality legislation, nor the scope of Section 401(d) with regard to each. We conclude that a Section 401 water quality certificate may include limitations to enforce all state water quality—related statutes and rules including, but not limited to, water quality standards.

6. In 1971 the Legislature of the State of Washington enacted the Water Resources Act, chapter 90.54 RCW. By that Act it was established that:

"Utilization and management of the waters of the state shall be guided by the following general declaration of fundamentals:

(3) The *quality* of the natural environment shall be protected and, where possible, enhanced as follows:

(a) *Perennial rivers and streams of the state shall be retained with base flows necessary to provide for preservation of wildlife, fish, scenic, aesthetic and other environmental values, and navigational values. Lakes and ponds shall be retained substantially in their natural condition. Withdrawals of water which*

would conflict therewith shall be authorized only in those situations where it is clear that overriding considerations of the public interest would be served. RCW 90.54.020. *Emphasis added.*

Through enactment of this legislation [sic], the quality of state waters such as the Dosewallips River is not to be determined solely by peering into a microscope. Rather, the quality is affected when factors comprising the essential character of the river are affected, such as the route and quantity of the river's flow.

7. The provision of the Water Resources Act calling for preservation of base flows in perennial rivers of the state, RCW 90.54.020(3)(a), is a water quality—related state statute which is an “appropriate requirement of State law” under Section 401(d) of the federal Clean Water Act.

8. Base flow limitations of the kind at issue are an appropriate measure to carry out RCW 90.54.020(3)(a) of the Water Resources Act. We have previously sustained the practice of providing such base flows by regulatory orders or the permit issuing process in the context of water rights disputes. *Smith v. Department of Ecology*, PCHB No. 81-34 (1981) and *Northwest Steelhead and Salmon Council v. City of Tacoma*, PCHB No. 81-148 (1982). Base flow limitations are an equally appropriate measure to carry out the Water Resources Act in the context of a Section 401 water quality certification that will become a condition on a federal license.

9. The Department of Ecology acted within the authority conferred by Section 401(d) of the federal Clean Water Act in placing base flow limitations within its water quality certification for preservation of the fishery resource and related values.

Wherefore the Board enters this

ORDER

The appellant's Motion for Summary Judgment is denied. The Department of Ecology's Cross Motion for Summary Judgment is granted.

DONE at Lacey, Washington this 10th day of April, 1987.

POLLUTION CONTROL HEARINGS BOARD

/s/ Lawrence J. Faulk
LAWRENCE J. FAULK
Chairman

/s/ Wick Dufford
WICK DUFFORD
Member

/s/ Judith A. Bendor
JUDITH A. BENDOR
Member

/s/ William A. Harrison
WILLIAM A. HARRISON
Administrative Appeals Judge

APPENDIX H

[SEAL]

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
7272 Cleanwater Lane, LU-11
Olympia, Washington 98504-6811
(206) 753-2353

June 11, 1986

P.U.D. No. 1
Jefferson County Courthouse
Port Townsend, Washington 98368

Gentlemen:

Water Quality Certification Request

This letter is in response to your request for Water Quality Certification for the Elkhorn Hydroelectric Project (FERC No. 6002) Certification is hereby granted as required by Section 401 of the Federal Water Pollution Control Act, provided the following conditions are met:

1. A *Short-Term Modification to the Water Quality Criteria* (WAC 173-20-035) must be obtained from the Department of Ecology prior to the start of work in the waterway. This authorization is required when instream construction activities will unavoidably violate state water quality criteria (particularly turbidity) on a short-term basis. It will not be issued until the project is actually starting toward construction, evidenced by advertising for bids to construct. The application shall be submitted to the Southwest Regional Office of the Department of Ecology a minimum of 180 days before construction is scheduled to commence.

2. The request for a short-term modification shall include a plan of operation which identifies a sequence of construction events, together with provisions for mitigating water quality impacts, and a copy of the Hydraulics Project Approval secured from the Washington Departments of Fisheries and Game.
3. All construction contracts for this project shall contain specific provisions for water pollution control. The contracts shall also provide specific payment provisions for unanticipated water pollution control measures.
4. Prior to completion of the final project design, the applicant shall evaluate the future operation of the existing cleanout gate with respect to compliance with water quality standards during operation of this facility and submit a proposal which addresses the maintenance task of accumulated sediment removal.
5. A *State Water Right Permit* (Chapters 90.03.250 RCW and 508-12 WAC) must be obtained prior to commencing construction of the project. As a condition of this water quality certification, the project must comply with the stream flow requirements as set forth below:

January	140	cfs	or	natural flow
February	100	cfs	or	natural flow
March	200	cfs	or	natural flow
April	200	cfs	or	natural flow
May	200	cfs	or	natural flow
June	200	cfs	or	natural flow
July	200	cfs	or	natural flow
August	200	cfs	or	natural flow
September	150	cfs	or	natural flow
October	140	cfs	or	natural flow
November	140	cfs	or	natural flow
December	140	cfs	or	natural flow

While these flows are in excess of those required to maintain water quality in the bypass region, they are the flows

recommend by the resource agencies and tribes for maintaining sufficient flows for the fishery resource. They are included herein as a matter of cooperation with these other agencies.

6. *Specific Construction Activity Conditions*

Care will be taken to prevent any petroleum products, paint, chemicals, or other harmful materials from entering the water.

All construction debris will be disposed of on land so it cannot enter state waters.

All lumber treated with creosote or other protective material will be completely dry before use in or near the waterway.

No wood waste or other organic material is to be used in any fill.

Only clean, durable riprap will be used.

Dredge spoils and/or excess excavated material shall be disposed of in a manner that prevents the spoils, leachates or drainage from the spoils, from entering state waters.

All sanitary wastes generated at the power plant during construction and operation shall be discharged to the sewerage system. Solid wastes generated at the power plant during construction and operation shall be disposed of in accordance with the regulations of the local health district.

Oil spill containment and cleanup equipment shall be on hand at the power plant at all times.

Failure to comply with the conditions described above may result in revocation of this water quality certification and issuance of civil penalties in accordance with the enforcement policies and guidelines of the Department of Ecology.

Sincerely,

/s/ Clark Haberman
CLARK HABERMAN
Regional Manager

CH:pw(WB4/5)

APPENDIX I

STATUTES INVOLVED

A. RELEVANT PROVISIONS OF THE CLEAN WATER ACT, ALSO KNOWN AS THE FEDERAL WATER POLLUTION CONTROL ACT

1. Section 301 of the Clean Water Act, also known as the Federal Water Pollution Control Act, as codified at 33 U.S.C. § 1311, provides:

§ 1311. Effluent limitations**(a) Illegality of pollutant discharges except in compliance with law**

Except as in compliance with this section and sections 1312, 1316, 1317, 1328, 1342, and 1344 of this title, the discharge of any pollutant by any person shall be unlawful.

(b) Timetable for achievement of objectives

In order to carry out the objective of this chapter there shall be achieved—

(1)(A) not later than July 1, 1977, effluent limitations for point sources, other than publicly owned treatment works, (i) which shall require the application of the best practicable control technology currently available as defined by the Administrator pursuant to section 1314(b) of this title, or (ii) in the case of a discharge into a publicly owned treatment works which meets the requirements of subparagraph (B) of this paragraph, which shall require compliance with any applicable pretreatment requirements and any requirements under section 1317 of this title; and

(B) for publicly owned treatment works in existence on July 1, 1977, or approved pursuant to section 1283 of this title prior to June 30, 1974 (for which construction must be completed within four years of approval), effluent limitations based upon secondary treatment as defined by the Administrator pursuant to section 1314(d)(1) of this title; or,

(C) not later than July 1, 1977, any more stringent limitation, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations (under authority preserved by section 1370 of this title) or any other Federal law or regulation, or required to implement any applicable water quality standard established pursuant to this chapter.

(2)(A) for pollutants identified in subparagraphs (C), (D), and (F) of this paragraph, effluent limitations for categories and classes of point sources, other than publicly owned treatment works, which (i) shall require application of the best available technology economically achievable for such category or class, which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 1314(b)(2) of this title, which such effluent limitations shall require the elimination of discharges of all pollutants if the Administrator finds, on the basis of information available to him (including information developed pursuant to section 1325 of this title), that such elimination is technologically and economically achievable for a category or class of

point sources as determined in accordance with regulations issued by the Administrator pursuant to section 1314(b)(2) of this title, or (ii) in the case of the introduction of a pollutant into a publicly owned treatment works which meets the requirements of subparagraph (B) of this paragraph, shall require compliance with any applicable pretreatment requirements and any other requirement under section 1317 of this title;

(B) Repealed. Pub. L. 97-117, § 21(b), Dec. 29, 1981, 95 Stat. 1632.

(C) with respect to all toxic pollutants referred to in table 1 of the Committee Print Numbered 95-30 of the Committee on Public Works and Transportation of the House of Representatives compliance with effluent limitations in accordance with subparagraph (A) of this paragraph as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 1314(b) of this title, and in no case later than March 31, 1989;

(D) for all toxic pollutants listed under paragraph (1) of subsection (a) of section 1317 of this title which are not referred to in subparagraph (C) of this paragraph compliance with effluent limitations in accordance with subparagraph (A) of this paragraph as expeditiously as practicable, but in no case later than three years after the date such limitations are promulgated under section 1314(b) of this title, and in no case later than March 31, 1989;

(E) as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 1314

(b) of this title, and in no case later than March 31, 1989, compliance with effluent limitations for categories and classes of point sources, other than publicly owned treatment works, which in the case of pollutants identified pursuant to section 1314(a)(4) of this title shall require application of the best conventional pollutant control technology as determined in accordance with regulations issued by the Administrator pursuant to section 1314(b)(4) of this title; and

(F) for all pollutants (other than those subject to subparagraphs (C), (D), or (E) of this paragraph) compliance with effluent limitations in accordance with subparagraph (A) of this paragraph as expeditiously as practicable but in no case later than 3 years after the date such limitations are established, and in no case later than March 31, 1989.

(3)(A) for effluent limitations under paragraph (1)(A)(i) of this subsection promulgated after January 1, 1982, and requiring a level of control substantially greater or based on fundamentally different control technology than under permits for an industrial category issued before such date, compliance as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 1314(b) of this title, and in no case later than March 31, 1989; and

(B) for any effluent limitation in accordance with paragraph (1)(A)(i), 2(A)(i), or (2)(E) of this subsection established only on the basis of section 1342(a)(1) of this title in a permit issued after February 4, 1987, compliance as expeditiously as practicable but in no

case later than three years after the date such limitations are established, and in no case later than March 31, 1989.

(c) Modification of timetable

The Administrator may modify the requirements of subsection (b)(2)(A) of this section with respect to any point source for which a permit application is filed after July 1, 1977, upon a showing by the owner or operator of such point source satisfactory to the Administrator that such modified requirements (1) will represent the maximum use of technology within the economic capability of the owner or operator; and (2) will result in reasonable further progress toward the elimination of the discharge of pollutants.

(d) Review and revision of effluent limitations

Any effluent limitation required by paragraph (2) of subsection (b) of this section shall be reviewed at least every five years and, if appropriate, revised pursuant to the procedure established under such paragraph.

(e) All point discharge source application of effluent limitations

Effluent limitations established pursuant to this section or section 1312 of this title shall be applied to all point sources of discharge of pollutants in accordance with the provisions of this chapter.

(f) Illegality of discharge of radiological, chemical or biological warfare agents, high-level radioactive waste, or medical waste

Notwithstanding any other provisions of this chapter it shall be unlawful to discharge any radiological, chemical, or biological warfare agent, any high-level

radioactive waste, or any medical waste, into the navigable waters.

(g) Modifications for certain nonconventional pollutants

(1) General authority

The Administrator, with the concurrence of the State, may modify the requirements of subsection (b)(2)(A) of this section with respect to the discharge from any point source of ammonia, chlorine, color, iron, and total phenols (4AAP) (when determined by the Administrator to be a pollutant covered by subsection (b)(2)(F) of this section) and any other pollutant which the Administrator lists under paragraph (4) of this subsection.

(2) Requirements for granting modifications

A modification under this subsection shall be granted only upon a showing by the owner or operator of a point source satisfactory to the Administrator that—

(A) such modified requirements will result at a minimum in compliance with the requirements of subsection (b)(1)(A) or (C) of this section, whichever is applicable;

(B) such modified requirements will not result in any additional requirements on any other point or nonpoint source; and

(C) such modification will not interfere with the attainment or maintenance of that water quality which shall assure protection of public water supplies, and the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities, in and on the water

and such modification will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity, or teratogenicity), or synergistic propensities.

(3) Limitation on authority to apply for subsection (c) modification

If an owner or operator of a point source applies for a modification under this subsection with respect to the discharge of any pollutant, such owner or operator shall be eligible to apply for modification under subsection (c) of this section with respect to such pollutant only during the same time period as he is eligible to apply for a modification under this subsection.

(4) Procedures for listing additional pollutants

(A) General authority

Upon petition of any person, the Administrator may add any pollutant to the list of pollutants for which modification under this section is authorized (except for pollutants identified pursuant to section 1314(a)(4) of this title, toxic pollutants subject to section 1317(a) of this title, and the thermal component of discharges) in accordance with the provisions of this paragraph.

(B) Requirements for listing

(i) Sufficient information

The person petitioning for listing of an additional pollutant under this subsection shall submit to the Administrator sufficient information to make the determinations required by this subparagraph.

(ii) Toxic criteria determination

The Administrator shall determine whether or not the pollutant meets the criteria for listing as a toxic pollutant under section 1317(a) of this title.

(iii) Listing as toxic pollutant

If the Administrator determines that the pollutant meets the criteria for listing as a toxic pollutant under section 1317(a) of this title, the Administrator shall list the pollutant as a toxic pollutant under section 1317(a) of this title.

(iv) Nonconventional criteria determination

If the Administrator determines that the pollutant does not meet the criteria for listing as a toxic pollutant under such section and determines that adequate test methods and sufficient data are available to make the determinations required by paragraph (2) of this subsection with respect to the pollutant, the Administrator shall add the pollutant to the list of pollut-

ants specified in paragraph (1) of this subsection for which modifications are authorized under this subsection.

(C) Requirements for filing of petitions

A petition for listing of a pollutant under this paragraph—

(i) must be filed not later than 270 days after the date of promulgation of an applicable effluent guideline under section 1314 of this title;

(ii) may be filed before promulgation of such guideline; and

(iii) may be filed with an application for a modification under paragraph (1) with respect to the discharge of such pollutant.

(D) Deadline for approval of petition

A decision to add a pollutant to the list of pollutants for which modifications under this subsection are authorized must be made within 270 days after the date of promulgation of an applicable effluent guideline under section 1314 of this title.

(E) Burden of proof

The burden of proof for making the determinations under subparagraph (B) shall be on the petitioner.

(5) Removal of pollutants

The Administrator may remove any pollutant from the list of pollutants for which modifications are authorized under this subsection if

the Administrator determines that adequate test methods and sufficient data are no longer available for determining whether or not modifications may be granted with respect to such pollutant under paragraph (2) of this subsection.

(h) Modification of secondary treatment requirements

The Administrator, with the concurrence of the State, may issue a permit under section 1342 of this title which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from a publicly owned treatment works into marine waters, if the applicant demonstrates to the satisfaction of the Administrator that—

(1) there is an applicable water quality standard specific to the pollutant for which the modification is requested, which has been identified under section 1314(a)(6) of this title;

(2) the discharge of pollutants in accordance with such modified requirements will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on the water;

(3) the applicant has established a system for monitoring the impact of such discharge on a representative sample of aquatic biota, to the extent practicable, and the scope of such monitoring is limited to include only those scientific

investigations which are necessary to study the effects of the proposed discharge;

(4) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

(5) all applicable pretreatment requirements for sources introducing waste into such treatment works will be enforced;

(6) in the case of any treatment works serving a population of 50,000 or more, with respect to any toxic pollutant introduced into such works by an industrial discharger for which pollutant there is no applicable pretreatment requirement in effect, sources introducing waste into such works are in compliance with all applicable pretreatment requirements, the applicant will enforce such requirements, and the applicant has in effect a pretreatment program which, in combination with the treatment of discharges from such works, removes the same amount of such pollutant as would be removed if such works were to apply secondary treatment to discharges and if such works had no pretreatment program with respect to such pollutant;

(7) to the extent practicable, the applicant has established a schedule of activities designed to eliminate the entrance of toxic pollutants from nonindustrial sources into such treatment works;

(8) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(9) the applicant at the time such modification becomes effective will be discharging effluent which has received at least primary or equivalent treatment and which meets the criteria established under section 1314(a)(1) of this title after initial mixing in the waters surrounding or adjacent to the point at which such effluent is discharged.

For the purposes of this subsection the phrase "the discharge of any pollutant into marine waters" refers to a discharge into deep waters of the territorial sea or the waters of the contiguous zone, or into saline estuarine waters where there is strong tidal movement and other hydrological and geological characteristics which the Administrator determines necessary to allow compliance with paragraph (2) of this subsection, and section 1251(a)(2) of this title. For the purpose of paragraph (9), "primary or equivalent treatment" means treatment by screening, sedimentation, and skimming adequate to remove at least 30 percent of the biological oxygen demanding material and of the suspended solids in the treatment works influent, and disinfection, where appropriate. A municipality which applies secondary treatment shall be eligible to receive a permit pursuant to this subsection which modifies the requirements of subsection (b)(1)(B) of this section with respect to the discharge of any pollutant from any treatment works owned by such municipality into marine waters. No permit issued under this subsection shall authorize the discharge of sewage sludge into marine waters. In order for a permit to be issued under this subsection for the discharge of a pollutant into marine waters, such marine waters must exhibit characteristics assuring that water providing dilution does not contain significant amounts of previously discharged effluent from such treatment works. No permit issued under this subsec-

tion shall authorize the discharge of any pollutant into saline estuarine waters which at the time of application do not support a balanced indigenous population of shellfish, fish and wildlife, or allow recreation in and on the waters or which exhibit ambient water quality below applicable water quality standards adopted for the protection of public water supplies, shellfish, fish and wildlife or recreational activities or such other standards necessary to assure support and protection of such uses. The prohibition contained in the preceding sentence shall apply without regard to the presence or absence of a casual relationship between such characteristics and the applicant's current or proposed discharge. Notwithstanding any other provisions of this subsection, no permit may be issued under this subsection for discharge of a pollutant into the New York Bight Apex consisting of the ocean waters of the Atlantic Ocean westward of 73 degrees 30 minutes west longitude and northward of 40 degrees 10 minutes north latitude.

(i) Municipal time extensions

(1) Where construction is required in order for a planned or existing publicly owned treatment works to achieve limitations under subsection (b) (1)(B) or (b)(1)(C) of this section, but (A) construction cannot be completed within the time required in such subsection, or (B) the United States has failed to make financial assistance under this chapter available in time to achieve such limitations by the time specified in such subsection, the owner or operator of such treatment works may request the Administrator (or if appropriate the State) to issue a permit pursuant to section 1342 of this title or to modify a permit issued pursuant to that section to extend such time for compliance. Any such request shall be filed with the Administrator

(or if appropriate the State) within 180 days after February 4, 1987. The Administrator (or if appropriate the State) may grant such request and issue or modify such a permit, which shall contain a schedule of compliance for the publicly owned treatment works based on the earliest date by which such financial assistance will be available from the United States and construction can be completed, but in no event later than July 1, 1988, and shall contain such other terms and conditions, including those necessary to carry out subsections (b) through (g) of section 1281 of this title, Section 1317 of this title, and such interim effluent limitations applicable to that treatment works as the Administrator determines are necessary to carry out the provisions of this chapter.

(2)(A) Where a point source (other than a publicly owned treatment works) will not achieve the requirements of subsections (b)(1)(A) and (b)(1)(C) of this section and—

(i) if a permit issued prior to July 1, 1977, to such point source is based upon a discharge into a publicly owned treatment works; or

(ii) if such point source (other than a publicly owned treatment works) had before July 1, 1977, a contract (enforceable against such point source) to discharge into a publicly owned treatment works; or

(iii) if either an application made before July 1, 1977, for a construction grant under this chapter for a publicly owned treatment works, or engineering or architectural plans or working drawings made before July 1, 1977, for a publicly owned treatment works, show that such point source was to discharge into such publicly owned treatment works,

and such publicly owned treatment works is presently unable to accept such discharge without con-

struction, and in the case of a discharge to an existing publicly owned treatment works, such treatment works has an extension pursuant to paragraph (1) of this subsection, the owner or operator of such point source may request the Administrator (or if appropriate the State) to issue or modify such a permit pursuant to such section 1342 of this title to extend such time for compliance. Any such request shall be filed with the Administrator (or if appropriate the State) within 180 days after December 27, 1977, or the filing of a request by the appropriate publicly owned treatment works under paragraph (1) of this subsection, whichever is later. If the Administrator (or if appropriate the State) finds that the owner or operator of such point source has acted in good faith, he may grant such request and issue or modify such a permit, which shall contain a schedule of compliance for the point source to achieve the requirements of subsections (b)(1)(A) and (C) of this section and shall contain such other terms and conditions, including pretreatment and interim effluent limitations and water conservation requirements applicable to that point source, as the Administrator determines are necessary to carry out the provisions of this chapter.

(B) No time modification granted by the Administrator (or if appropriate the State) pursuant to paragraph (2)(A) of this subsection shall extend beyond the earliest date practicable for compliance or beyond the date of any extension granted to the appropriate publicly owned treatment works pursuant to paragraph (1) of this subsection, but in no event shall it extend beyond July 1, 1988; and no such time modification shall be granted unless (i) the publicly owned treatment works will be in operation and available to the point source before July 1, 1988, and will meet the requirements of subsections (b)(1)(B) and (C) of this section after receiving

the discharge from that point source; and (ii) the point source and the publicly owned treatment works have entered into an enforceable contract requiring the point source to discharge into the publicly owned treatment works, the owner or operator of such point source to pay the costs required under section 1284 of this title, and the publicly owned treatment works to accept the discharge from the point source; and (iii) the permit for such point source requires that point source to meet all requirements under section 1317(a) and (b) of this title during the period of such time modification.

(j) Modification procedures

(1) Any application filed under this section for a modification of the provisions of—

(A) subsection (b)(1)(B) of this section under subsection (h) of this section shall be filed not later than [sic] the 365th day which begins after December 29, 1981, except that a publicly owned treatment works which prior to December 31, 1982, had a contractual arrangement to use a portion of the capacity of an ocean outfall operated by another publicly owned treatment works which has applied for or received modification under subsection (h) of this section, may apply for a modification of subsection (h) of this section in its own right not later than 30 days after February 4, 1987;

(B) subsection (b)(2)(A) of this section as it applies to pollutants identified in subsection (b)(2)(F) of this section shall be filed not later than 270 days after the date of promulgation of an applicable effluent guideline under section 1314 of this title or not later than

270 days after December 27, 1977, whichever is later.

(2) Subject to paragraph (3) of this section, any application for a modification filed under subsection (g) of this section shall not operate to stay any requirement under this chapter, unless in the judgment of the Administrator such a stay or the modification sought will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity, or teratogenicity), or synergistic propensities, and that there is a substantial likelihood that the applicant will succeed on the merits of such application. In the case of an application filed under subsection (g) of this section, the Administrator may condition any stay granted under this paragraph on requiring the filing of a bond or other appropriate security to assure timely compliance with the requirements from which a modification is sought.

(3) COMPLIANCE REQUIREMENTS UNDER SUBSECTION (g).—

(A) EFFECT OF FILING.—An application for a modification under subsection (g) of this section and a petition for listing of a pollutant as a pollutant for which modifications are authorized under such subsection shall not stay the requirement that the person seeking such modification or listing comply with effluent limitations under this chapter for all pollutants not the subject of such application or petition.

(B) EFFECT OF DISAPPROVAL.—Disapproval of an application for a modification under subsection (g) of this section shall not stay the

requirement that the person seeking such modification comply with all applicable effluent limitations under this chapter.

(4) DEADLINE FOR SUBSECTION (g) DECISION.—An application for a modification with respect to a pollutant filed under subsection (g) of this section must be approved or disapproved not later than 365 days after the date of such filing; except that in any case in which a petition for listing such pollutant as a pollutant for which modifications are authorized under such subsection is approved, such application must be approved or disapproved not later than 365 days after the date of approval of such petition.

(k) Innovative technology

In the case of any facility subject to a permit under section 1342 of this title which proposes to comply with the requirements of subsection (b)(2)(A) or (b)(2)(E) of this section by replacing existing production capacity with an innovative production process which will result in an effluent reduction significantly greater than that required by the limitation otherwise applicable to such facility and moves toward the national goal of eliminating the discharge of all pollutants, or with the installation of an innovative control technique that has a substantial likelihood for enabling the facility to comply with the applicable effluent limitation by achieving a significantly greater effluent reduction than that required by the applicable effluent limitation and moves toward the national goal of eliminating the discharge of all pollutants, or by achieving the required reduction with an innovative system that has the potential for significantly lower costs than the systems which have been determined by the Administrator to be economically achievable, the Administrator (or the State with an approved program under

section 1342 of this title, in consultation with the Administrator) may establish a date for compliance under subsection (b)(2)(A) or (b)(2)(E) of this section no later than two years after the date for compliance with such effluent limitation which would otherwise be applicable under such subsection, if it is also determined that such innovative system has the potential for industrywide application.

(l) Toxic pollutants

Other than as provided in subsection (n) of this section, the Administrator may not modify any requirement of this section as it applies to any specific pollutant which is on the toxic pollutant list under section 1317(a)(1) of this title.

(m) Modification of effluent limitation requirements for point sources

(1) The Administrator, with the concurrence of the State, may issue a permit under section 1342 of this title which modifies the requirements of subsections (b)(1)(A) and (b)(2)(E) of this section, and of section 1343 of this title, with respect to effluent limitations to the extent such limitations relate to biochemical oxygen demand and pH from discharges by an industrial discharger in such State into deep waters of the territorial seas, if the applicant demonstrates and the Administrator finds that—

(A) the facility for which modification is sought is covered at the time of the enactment of this subsection by National Pollutant Discharge Elimination System permit number CA0005894 or CA0005282;

(B) the energy and environmental costs of meeting such requirements of subsection (b)(1)(A) and (b)(2)(E) of this section and sec-

tion 1343 of this title exceed by an unreasonable amount the benefits to be obtained, including the objectives of this chapter;

(C) the applicant has established a system for monitoring the impact of such discharges on a representative sample of aquatic biota;

(D) such modified requirements will not result in any additional requirements on any other point or nonpoint source;

(E) there will be no new or substantially increased discharges from the point source of the pollutant to which the modification applies above that volume of discharge specified in the permit;

(F) the discharge is into waters where there is strong tidal movement and other hydrological and geological characteristics which are necessary to allow compliance with this subsection and section 1251(a)(2) of this title;

(G) the applicant accepts as a condition to the permit a contractual obligation to use funds in the amount required (but not less than \$250,000 per year for ten years) for research and development of water pollution control technology, including but not limited to closed cycle technology;

(H) the facts and circumstances present a unique situation which, if relief is granted, will not establish a precedent or the relaxation of the requirements of this chapter applicable to similarly situated discharges; and

(I) no owner or operator of a facility comparable to that of the applicant situated in the United States has demonstrated that it would

be put at a competitive disadvantage to the applicant (or the parent company or any subsidiary thereof) as a result of the issuance of a permit under this subsection.

(2) The effluent limitations established under a permit issued under paragraph (1) shall be sufficient to implement the applicable State water quality standards, to assure the protection of public water supplies and protection and propagation of a balanced, indigenous population of shellfish, fish, fauna, wildlife, and other aquatic organisms, and to allow recreational activities in and on the water. In setting such limitations, the Administrator shall take into account any seasonal variations and the need for an adequate margin of safety, considering the lack of essential knowledge concerning the relationship between effluent limitations and water quality and the lack of essential knowledge of the effects of discharges on beneficial uses of the receiving waters.

(3) A permit under this subsection may be issued for a period not to exceed five years, and such a permit may be renewed for one additional period not to exceed five years upon a demonstration by the applicant and a finding by the Administrator at the time of application for any such renewal that the provisions of this subsection are met.

(4) The Administrator may terminate a permit issued under this subsection if the Administrator determines that there has been a decline in ambient water quality of the receiving waters during the period of the permit even if a direct cause and effect relationship cannot be shown: *Provided*, That if the effluent from a source with a permit issued under this subsection is contributing to a decline in ambient water quality of the receiving waters, the Administrator shall terminate such permit.

(n) Fundamentally different factors

(1) General rule

The Administrator, with the concurrence of the State, may establish an alternative requirement under subsection (b)(2) of this section or section 1317(b) of this title for a facility that modifies the requirements of national effluent limitation guidelines or categorical pretreatment standards that would otherwise be applicable to such facility, if the owner or operator of such facility demonstrates to the satisfaction of the Administrator that—

(A) the facility is fundamentally different with respect to the factors (other than cost) specified in section 1314(b) or 1314 (g) of this title and considered by the Administrator in establishing such national effluent limitation guidelines or categorical pretreatment standards;

(B) the application—

(i) is based solely on information and supporting data submitted to the Administrator during the rulemaking for establishment of the applicable national effluent limitation guidelines or categorical pretreatment standard specifically raising the factors that are fundamentally different for such facility; or

(ii) is based on information and supporting data referred to in clause (i) and information and supporting data the applicant did not have a reasonable opportunity to submit during such rulemaking;

(C) the alternative requirement is no less stringent than justified by the fundamental difference; and

(D) the alternative requirement will not result in a non-water quality environmental impact which is markedly more adverse than the impact considered by the Administrator in establishing such national effluent limitation guideline or categorical pretreatment standard.

(2) Time limit for applications

An application for an alternative requirement which modifies the requirements of an effluent limitation or pretreatment standard under this subsection must be submitted to the Administrator within 180 days after the date on which such limitation or standard is established or revised, as the case may be.

(3) Time limit for decision

The Administrator shall approve or deny by final agency action an application submitted under this subsection within 180 days after the date such application is filed with the Administrator.

(4) Submission of information

The Administrator may allow an applicant under this subsection to submit information and supporting data until the earlier of the date the application is approved or denied or the last day that the Administrator has to approve or deny such application.

(5) Treatment of pending applications

For the purposes of this subsection, an application for an alternative requirement based on fundamentally different factors which is pending on February 4, 1987, shall be treated as having been submitted to the Administrator on the 180th day following February 4, 1987. The applicant may amend the application to take into account the provisions of this subsection.

(6) Effect of submission of application

An application for an alternative requirement under this subsection shall not stay the applicant's obligation to comply with the effluent limitation guideline or categorical pretreatment standard which is the subject of the application.

(7) Effect of denial

If an application for an alternative requirement which modifies the requirements of an effluent limitation or pretreatment standard under this subsection is denied by the Administrator, the applicant must comply with such limitation or standard as established or revised, as the case may be.

(8) Reports

Every 6 months after February 4, 1987, the Administrator shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Public Works and Transportation of the House of Representatives a report on the status of applications for alternative requirements which modify the requirements of effluent limitations under section 1311 or 1314 of this title or any national categorical

pretreatment standard under section 1317(b) of this title filed before, on, or after February 4, 1987.

(o) Application fees

The Administrator shall prescribe and collect from each applicant fees reflecting the reasonable administrative costs incurred in reviewing and processing applications for modifications submitted to the Administrator pursuant to subsections (c), (g), (i), (k), (m), and (n) of this section, section 1314(d)(4) of this title, and section 1326(a) of this title. All amounts collected by the Administrator under this subsection shall be deposited into a special fund of the Treasury entitled "Water Permits and Related Services" which shall thereafter be available for appropriation to carry out activities of the Environmental Protection Agency for which such fees were collected.

(p) Modified permit for coal remining operations

(1) In general

Subject to paragraphs (2) through (4) of this subsection, the Administrator, or the State in any case which the State has an approved permit program under section 1342(b) of this title, may issue a permit under section 1342 of this title which modifies the requirements of subsection (b)(2)(A) of this section with respect to the pH level of any pre-existing discharge, and with respect to pre-existing discharges of iron and manganese from the remined area of any coal remining operation or with respect to the pH level or level of iron or manganese in any pre-existing discharge affected by the remining operation. Such modi-

fied requirements shall apply the best available technology economically achievable on a case-by-case basis, using best professional judgment, to set specific numerical effluent limitations in each permit.

(2) Limitations

The Administrator or the State may only issue a permit pursuant to paragraph (1) if the applicant demonstrates to the satisfaction of the Administrator or the State, as the case may be, that the coal remining operation will result in the potential for improved water quality from the remining operation but in no event shall such a permit allow the pH level of any discharge, and in no event shall such a permit allow the discharges of iron and manganese, to exceed the levels being discharged from the remined area before the coal remining operation begins. No discharge from, or affected by, the remining operation shall exceed State water quality standards established under section 1313 of this title.

(3) Definitions

For purposes of this subsection—

(A) Coal remining operation

The term "coal remining operation" means a coal mining operation which begins after February 4, 1987 at a site on which coal mining was conducted before August 3, 1977.

(B) Remined area

The term "remined area" means only that area of any coal remining operation

on which coal mining was conducted before August 3, 1977.

(C) Pre-existing discharge

The term "pre-existing discharge" means any discharge at the time of permit application under this subsection.

(4) Applicability of strip mining laws

Nothing in this subsection shall affect the application of the Surface Mining Control and Reclamation Act of 1977 [30 U.S.C. 1201 et seq.] to any coal remining operation, including the application of such Act to suspended solids.

2. Section 302 of the Clean Water Act, also known as the Federal Water Pollution Control Act, as codified at 33 U.S.C. § 1312, provides:

§ 1312. Water quality related effluent limitations

(a) Establishment

Whenever, in the judgment of the Administrator or as identified under section 1314(l) of this title, discharges of pollutants from a point source or group of point sources, with the application of effluent limitations required under section 1311(b)(2) of this title, would interfere with the attainment or maintenance of that water quality in a specific portion of the navigable waters which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water, effluent limitations (including alternative effluent control strategies) for such point source or sources shall be established which can reasonably be

expected to contribute to the attainment or maintenance of such water quality.

(b) Modifications of effluent limitations

(1) Notice and hearing

Prior to establishment of any effluent limitation pursuant to subsection (a) of this section, the Administrator shall publish such proposed limitation and within 90 days of such publication hold a public hearing.

(2) Permits

(A) No reasonable relationship

The Administrator, with the concurrence of the State, may issue a permit which modifies the effluent limitations required by subsection (a) of this section for pollutants other than toxic pollutants if the applicant demonstrates at such hearing that (whether or not technology or other alternative control strategies are available) there is no reasonable relationship between the economic and social costs and the benefits to be obtained (including attainment of the objective of this chapter) from achieving such limitation.

(B) Reasonable progress

The Administrator, with the concurrence of the State, may issue a permit which modifies the effluent limitations required by subsection (a) of this section for toxic pollutants for a single period not to exceed 5 years if the applicant demonstrates to the satisfaction of the Administrator

that such modified requirements (i) will represent the maximum degree of control within the economic capability of the owner and operator of the source, and (ii) will result in reasonable further progress beyond the requirements of section 1311(b) (2) of this title toward the requirements of subsection (a) of this section.

(c) Delay in application of other limitations

The establishment of effluent limitations under this section shall not operate to delay the application of any effluent limitation established under section 1311 of this title.

3. Section 303 of the Clean Water Act, also known as the Federal Water Pollution Control Act, as codified at 33 U.S.C. § 1313, provides:

§ 1313. Water quality standards and implementation plans

(a) Existing water quality standards

(1) In order to carry out the purpose of this chapter, any water quality standard applicable to interstate waters which was adopted by any State and submitted to, and approved by, or is a waiting [sic] approval by, the Administrator pursuant to this Act as in effect immediately prior to October 18, 1972, shall remain in effect unless the Administrator determined that such standard is not consistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972. If the Administrator makes such a determination he shall, within three months after October 18, 1972, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after the date of

such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(2) Any State which, before October 18, 1972, has adopted, pursuant to its own law, water quality standards applicable to intrastate waters shall submit such standards to the Administrator within thirty days after October 18, 1972. Each such standard shall remain in effect, in the same manner and to the same extent as any other water quality standard established under this chapter unless the Administrator determines that such standard is inconsistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972. If the Administrator makes such a determination he shall not later than the one hundred and twentieth day after the date of submission of such standards, notify the State and specify the changes needed to meet such requirements. If such changes are not adopted by the State within ninety days after such notification, the Administrator shall promulgate such changes in accordance with subsection (b) of this section.

(3)(A) Any State which prior to October 18, 1972, has not adopted pursuant to its own laws water quality standards applicable to intrastate waters shall, not later than one hundred and eighty days after October 18, 1972, adopt and submit such standards to the Administrator.

(B) If the Administrator determines that any such standards are consistent with the applicable requirements of this Act as in effect immediately prior to October 18, 1972, he shall approve such standards.

(C) If the Administrator determines that any such standards are not consistent with the applicable requirements of this Act as in effect immediately

prior to October 18, 1972, he shall, not later than the ninetieth day after the date of submission of such standards, notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standards pursuant to subsection (b) of this section.

(b) Proposed regulations

(1) The Administrator shall promptly prepare and publish proposed regulations setting forth water quality standards for a State in accordance with the applicable requirements of this Act as in effect immediately prior to October 18, 1972, if—

(A) the State fails to submit water quality standards within the times prescribed in subsection (a) of this section.

(B) a water quality standard submitted by such State under subsection (a) of this section is determined by the Administrator not to be consistent with the applicable requirements of subsection (a) of this section.

(2) The Administrator shall promulgate any water quality standard published in a proposed regulation not later than one hundred and ninety days after the date he publishes any such proposed standard, unless prior to such promulgation, such State has adopted a water quality standard which the Administrator determines to be in accordance with subsection (a) of this section.

(c) Review; revised standards; publication

(1) The Governor of a State or the State water pollution control agency of such State shall from time to time (but at least once each three year period beginning with October 18, 1972) hold public hearings for the purpose of reviewing applicable

water quality standards and, as appropriate, modifying and adopting standards. Results of such review shall be made available to the Administrator.

(2)(A) Whenever the State revises or adopts a new standard, such revised or new standard shall be submitted to the Administrator. Such revised or new water quality standards shall consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses. Such standards shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this chapter. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and also taking into consideration their use and value for navigation.

(B) Whenever a State reviews water quality standards pursuant to paragraph (1) of this subsection, or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria for all toxic pollutants listed pursuant to section 1317(a)(1) of this title for which criteria have been published under section 1314(a) of this title, the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the state, as necessary to support such designated uses. Such criteria shall be specific numerical criteria for such toxic pollutants. Where such numerical criteria are not available, whenever a State reviews water quality standards pursuant to paragraph (1), or revises or adopts new standards pursuant to this paragraph, such State shall adopt criteria based on biological monitoring or assessment methods consistent with information published pursuant to section 1314(a)(8) of this title. Nothing in this section shall be construed to limit or delay the use of effluent limitations or other per-

mit conditions based on or involving biological monitoring or assessment methods or previously adopted numerical criteria.

(3) If the Administrator, within sixty days after the date of submission of the revised or new standard, determines that such standard meets the requirements of this chapter, such standard shall thereafter be the water quality standard for the applicable waters of that State. If the Administrator determines that any such revised or new standard is not consistent with the applicable requirements of this chapter, he shall not later than the ninetieth day after the date of submission of such standard notify the State and specify the changes to meet such requirements. If such changes are not adopted by the State within ninety days after the date of notification, the Administrator shall promulgate such standard pursuant to paragraph (4) of this subsection.

(4) The Administrator shall promptly prepare and publish proposed regulations setting forth a revised or new water quality standard for the navigable waters involved—

(A) if a revised or new water quality standard submitted by such State under paragraph (3) of this subsection for such waters is determined by the Administrator not to be consistent with the applicable requirements of this chapter, or

(B) in any case where the Administrator determines that a revised or new standard is necessary to meet the requirements of this chapter.

The Administrator shall promulgate any revised or new standard under this paragraph not later than ninety days after he publishes such proposed standards, unless prior to such promulgation, such State has adopted a revised or new water quality standard which the Administrator determines to be in accordance with this chapter.

(d) Identification of areas with insufficient controls; maximum daily load; certain effluent limitations revision

(1)(A) Each State shall identify those waters within its boundaries for which the effluent limitations required by section 1311(b)(1)(A) and section 1311(b)(1)(B) of this title are not stringent enough to implement any water quality standard applicable to such waters. The State shall establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters.

(B) Each State shall identify those waters or parts thereof within its boundaries for which controls on thermal discharges under section 1311 of this title are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife.

(C) Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.

(D) Each State shall estimate for the waters identified in paragraph (1)(B) of this subsection the total maximum daily thermal load required to assure protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife. Such estimates shall take into account the normal

water temperatures, flow rates, seasonal variations, existing sources of heat input, and the dissipative capacity of the identified waters or parts thereof. Such estimates shall include a calculation of the maximum heat input that can be made into each such part and shall include a margin of safety which takes into account any lack of knowledge concerning the development of thermal water quality criteria for such protection and propagation in the identified waters or parts thereof.

(2) Each State shall submit to the Administrator from time to time, with the first such submission not later than one hundred and eighty days after the date of publication of the first identification of pollutants under section 1314(a)(2)(D) of this title, for his approval the waters identified and the loads established under paragraphs (1)(A), (1)(B), (1)(C), and (1)(D) of this subsection. The Administrator shall either approve or disapprove such identification and load not later than thirty days after the date of submission. If the Administrator approves such identification and load, such State shall incorporate them into its current plan under subsection (e) of this section. If the Administrator disapproves such identification and load, he shall not later than thirty days after the date of such disapproval identify such waters in such State and establish such loads for such waters as he determines necessary to implement the water quality standards applicable to such waters and upon such identification and establishment the State shall incorporate them into its current plan under subsection (e) of this section.

(3) For the specific purpose of developing information, each State shall identify all waters within its boundaries which it has not identified under paragraph (1)(A) and (1)(B) of this subsection

and estimate for such waters the total maximum daily load with seasonal variations and margins of safety, for those pollutants which the Administrator identifies under section 1314(a)(2) of this title as suitable for such calculation and for thermal discharges, at a level that would assure protection and propagation of a balanced indigenous population of fish, shellfish, and wildlife.

(4) LIMITATIONS ON REVISION OF CERTAIN EFFLUENT LIMITATIONS.—

(A) STANDARD NOT ATTAINED.—For waters identified under paragraph (1)(A) where the applicable water quality standard has not yet been attained, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section may be revised only if (i) the cumulative effect of all such revised effluent limitations based on such total maximum daily load or waste load allocation will assure the attainment of such water quality standard, or (ii) the designated use which is not being attained is removed in accordance with regulations established under this section.

(B) STANDARD ATTAINED.—For waters identified under paragraph (1)(A) where the quality of such waters equals or exceeds levels necessary to protect the designated use for such waters or otherwise required by applicable water quality standards, any effluent limitation based on a total maximum daily load or other waste load allocation established under this section, or any water quality standard established under this section, or any other permitting standard may be revised only if such revision is subject to and consistent with the antidegradation policy established under this section.

(e) Continuing planning process

(1) Each State shall have a continuing planning process approved under paragraph (2) of this subsection which is consistent with this chapter.

(2) Each State shall submit not later than 120 days after October 18, 1972, to the Administrator for his approval a proposed continuing planning process which is consistent with this chapter. Not later than thirty days after the date of submission of such a process the Administrator shall either approve or disapprove such process. The Administrator shall from time to time review each State's approved planning process for the purpose of insuring that such planning process is at all times consistent with this chapter. The Administrator shall not approve any State permit program under subchapter IV of this chapter for any State which does not have an approved continuing planning process under this section.

(3) The Administrator shall approve any continuing planning process submitted to him under this section which will result in plans for all navigable waters within such State, which include, but are not limited to, the following:

(A) effluent limitations and schedules of compliance at least as stringent as those required by section 1311(b)(1), section 1311(b)(2), section 1316, and section 1317 of this title, and at least as stringent as any requirements contained in any applicable water quality standard in effect under authority of this section;

(B) the incorporation of all elements of any applicable area-wide waste management plans under section 1288 of this title, and applicable basin plans under section 1289 of this title;

(C) total maximum daily load for pollutants in accordance with subsection (d) of this section;

(D) procedures for revision;

(E) adequate authority for intergovernmental cooperation;

(F) adequate implementation, including schedules of compliance, for revised or new water quality standards, under subsection (c) of this section;

(G) controls over the disposition of all residual waste from any water treatment processing;

(H) an inventory and ranking, in order of priority, of needs for construction of waste treatment works required to meet the applicable requirements of sections 1311 and 1312 of this title.

(f) Earlier compliance

Nothing in this section shall be construed to affect any effluent limitation, or schedule of compliance required by any State to be implemented prior to the dates set forth in sections 1311(b)(1) and 1311(b)(2) of this title nor to preclude any State from requiring compliance with any effluent limitation or schedule of compliance at dates earlier than such dates.

(g) Heat standards

Water quality standards relating to heat shall be consistent with the requirements of section 1326 of this title.

(h) Thermal water quality standards

For the purposes of this chapter the term "water quality standards" includes thermal water quality standards.

4. Section 306 of the Clean Water Act, also known as the Federal Water Pollution Control Act, as codified at 33 U.S.C. § 1316, provides:

§ 1316. National standards of performance**(a) Definitions**

For purposes of this section:

(1) The term "standard of performance" means a standard for the control of the discharge of pollutants which reflect the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants.

(2) The term "new source" means any source, the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance under this section which will be applicable to such source, if such standard is thereafter promulgated in accordance with this section.

(3) The term "source" means any building, structure, facility, or installation from which there is or may be the discharge of pollutants.

(4) The term "owner or operator" means any person who owns, leases, operates, controls, or supervises a source.

(5) The term "construction" means any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

(b) Categories of sources; Federal standards of performance for new sources

(1)(A) The Administrator shall, within ninety days after October 18, 1972, publish (and from time to time thereafter shall revise) a list of categories of sources, which shall, at the minimum, include:

- pulp and paper mills;
- paperboard, builders paper and board mills;
- meat product and rendering processing;
- dairy product processing;
- grain mills;
- canned and preserved fruits and vegetables processing;
- canned and preserved seafood processing;
- sugar processing;
- textile mills;
- cement manufacturing;
- feedlots;
- electroplating;
- organic chemicals manufacturing;
- inorganic chemicals manufacturing;
- plastic and synthetic materials manufacturing;
- soap and detergent manufacturing;
- fertilizer manufacturing;
- petroleum refining;
- iron and steel manufacturing;
- nonferrous metals manufacturing;
- phosphate manufacturing;
- steam electric powerplants;

ferroalloy manufacturing;
 leather tanning and finishing;
 glass and asbestos manufacturing;
 rubber processing; and
 timber products processing.

(B) As soon as practicable, but in no case more than one year, after a category of sources is included in a list under subparagraph (A) of this paragraph, the Administrator shall propose and publish regulations establishing Federal standards of performance for new sources within such category. The Administrator shall afford interested persons an opportunity for written comment on such proposed regulations. After considering such comments, he shall promulgate, within one hundred and twenty days after publication of such proposed regulations, such standards with such adjustments as he deems appropriate. The Administrator shall, from time to time, as technology and alternatives change, revise such standards following the procedure required by this subsection for promulgation of such standards. Standards of performance, or revisions thereof, shall become effective upon promulgation. In establishing or revising Federal standards of performance for new sources under this section, the Administrator shall take into consideration the cost of achieving such effluent reduction, and any non-water quality, environmental impact and energy requirements.

(2) The Administrator may distinguish among classes, types, and sizes within categories of new sources for the purpose of establishing such standards and shall consider the type of process employed (including whether batch or continuous).

(3) The provisions of this section shall apply to any new source owned or operated by the United States.

(c) State enforcement of standards of performance

Each State may develop and submit to the Administrator a procedure under State law for applying and enforcing standards of performance for new sources located in such State. If the Administrator finds that the procedure and the law of any State require the application and enforcement of standards of performance to at least the same extent as required by this section, such State is authorized to apply and enforce such standards of performance (except with respect to new sources owned or operated by the United States).

(d) Protection from more stringent standards

Notwithstanding any other provision of this chapter, any point source the construction of which is commenced after October 18, 1972, and which is so constructed as to meet all applicable standards of performance shall not be subject to any more stringent standard of performance during a ten-year period beginning on the date of completion of such construction or during the period of depreciation or amortization of such facility for the purposes of section 167 or 169 (or both) of title 26 whichever period ends first.

(e) Illegality of operation of new sources in violation of applicable standards of performance

After the effective date of standards of performance promulgated under this section, it shall be unlawful for any owner or operator of any new source to operate such source in violation of any standard of performance applicable to such source.

5. Section 307 of the Clean Water Act, also known as the Federal Water Pollution Control Act, as codified at 33 U.S.C. § 1317, provides:

§ 1317. Toxic and pretreatment effluent standards

(a) Toxic pollutant list; revision; hearing; promulgation of standards; effective date; consultation

(1) On and after December 27, 1977, the list of toxic pollutants or combination of pollutants subject to this chapter shall consist of those toxic pollutants listed in table 1 of Committee Print Numbered 95-30 of the Committee on Public Works and Transportation of the House of Representatives, and the Administrator shall publish, not later than the thirtieth day after December 27, 1977, that list. From time to time thereafter, the Administrator may revise such list and the Administrator is authorized to add to or remove from such list any pollutant. The Administrator in publishing any revised list, including the addition or removal of any pollutant from such list, shall take into account toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms. A determination of the Administrator under this paragraph shall be final except that if, on judicial review, such determination was based on arbitrary and capricious action of the Administrator, the Administrator shall make a redetermination.

(2) Each toxic pollutant listed in accordance with paragraph (1) of this subsection shall be subject to effluent limitations resulting from the application of the best available technology economically achievable for the applicable category or class of point sources established in accordance with sections 1311(b)(2) (A) and 1314(b)(2) of this title. The Administrator, in his discretion, may publish in the Federal Register a proposed effluent standard (which may include a prohibition) establishing requirements for

a toxic pollutant which, if an effluent limitation is applicable to a class or category of point sources, shall be applicable to such category or class only if such standard imposes more stringent requirements. Such published effluent standard (or prohibition) shall take into account the toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms and the nature and extent of the effect of the toxic pollutant on such organisms, and the extent to which effective control is being or may be achieved under other regulatory authority. The Administrator shall allow a period of not less than sixty days following publication of any such proposed effluent standard (or prohibition) for written comment by interested persons on such proposed standard. In addition, if within thirty days of publication of any such proposed effluent standard (or prohibition) any interested person so requests, the Administrator shall hold a public hearing in connection therewith. Such a public hearing shall provide an opportunity for oral and written presentations, such cross-examination as the Administrator determines is appropriate on disputed issues of material fact, and the transcription of a verbatim record which shall be available to the public. After consideration of such comments and any information and material presented at any public hearing held on such proposed standard or prohibition, the Administrator shall promulgate such standard (or prohibition) with such modification as the Administrator finds are justified. Such promulgation by the Administrator shall be made within two hundred and seventy days after publication of proposed standard (or prohibition). Such standard (or prohibition) shall be final except that if, on judicial review, such standard was not based on substantial evidence, the Administrator shall promulgate a revised standard.

Effluent limitations shall be established in accordance with sections 1311(b)(2)(A) and 1314(b)(2) of this title for every toxic pollutant referred to in table 1 of Committee Print Numbered 95-30 of the Committee on Public Works and Transportation of the House of Representatives as soon as practicable after December 27, 1977, but no later than July 1, 1980. Such effluent limitations or effluent standards (or prohibitions) shall be established for every other toxic pollutant listed under paragraph (1) of this subsection as soon as practicable after it is so listed.

(3) Each such effluent standard (or prohibition) shall be reviewed and, if appropriate, revised at least every three years.

(4) Any effluent standard promulgated under this section shall be at that level which the Administrator determines provides an ample margin of safety.

(5) When proposing or promulgating any effluent standard (or prohibition) under this section, the Administrator shall designate the category or categories of sources to which the effluent standard (or prohibition) shall apply. Any disposal of dredged material may be included in such a category of sources after consultation with the Secretary of the Army.

(6) Any effluent standard (or prohibition) established pursuant to this section shall take effect on such date or dates as specified in the order promulgating such standard, but in no case, more than one year from the date of such promulgation. If the Administrator determines that compliance within one year from the date of promulgation is technologically infeasible for a category of sources, the Administrator may establish the effective date of the effluent standard (or prohibition) for such category at the earliest date upon which compliance can be feasibly

attained by sources within such category, but in no event more than three years after the date of such promulgation.

(7) Prior to publishing any regulations pursuant to this section the Administrator shall, to the maximum extent practicable within the time provided, consult with appropriate advisory committees, States, independent experts, and Federal departments and agencies.

(b) Pretreatment standards hearing; promulgation; compliance period; revision; application to State and local laws

(1) The Administrator shall, within one hundred and eighty days after October 18, 1972, and from time to time thereafter, publish proposed regulations establishing pretreatment standards for introduction of pollutants into treatment works (as defined in section 1292 of this title) which are publicly owned for those pollutants which are determined not to be susceptible to treatment by such treatment works or which would interfere with the operation of such treatment works. Not later than ninety days after such publication, and after opportunity for public hearing, the Administrator shall promulgate such pretreatment standards. Pretreatment standards under this subsection shall specify a time for compliance not to exceed three years from the date of promulgation and shall be established to prevent the discharge of any pollutant through treatment works (as defined in section 1292 of this title) which are publicly owned, which pollutant interferes with, passes through, or otherwise is incompatible with such works. If, in the case of any toxic pollutant under subsection (a) of this section introduced by a source into a publicly owned treatment works, the treatment by such works removes all or any part

of such toxic pollutant and the discharge from such works does not violate that effluent limitation or standard which would be applicable to such toxic pollutant if it were discharged by such source other than through a publicly owned treatment works, and does not prevent sludge use or disposal by such works in accordance with section 1345 of this title, then the pretreatment requirements for the sources actually discharging such toxic pollutant into such publicly owned treatment works may be revised by the owner or operator of such works to reflect the removal of such toxic pollutant by such works.

(2) The Administrator shall, from time to time, as control technology, processes, operating methods, or other alternatives change, revise such standards following the procedure established by this subsection for promulgation of such standards.

(3) When proposing or promulgating any pretreatment standard under this section, the Administrator shall designate the category or categories of sources to which such standard shall apply.

(4) Nothing in this subsection shall affect any pretreatment requirement established by any State or local law not in conflict with any pretreatment standard established under this subsection.

(c) New sources of pollutants into publicly owned treatment works

In order to insure that any source introducing pollutants into a publicly owned treatment works, which source would be a new source subject to section 1316 of this title if it were to discharge pollutants, will not cause a violation of the effluent limitations established for any such treatment works, the Administrator shall promulgate pretreatment standards for the category of such sources simultaneously

with the promulgation of standards of performance under section 1316 of this title for the equivalent category of new sources. Such pretreatment standards shall prevent the discharge of any pollutant into such treatment works, which pollutant may interfere with, pass through, or otherwise be incompatible with such works.

(d) Operation in violation of standards unlawful

After the effective date of any effluent standard or prohibition or pretreatment standard promulgated under this section, it shall be unlawful for any owner or operator of any source to operate any source in violation of any such effluent standard or prohibition or pretreatment standard.

(e) Compliance date extension for innovative pretreatment systems

In the case of any facility that proposes to comply with the pretreatment standards of subsection (b) of this section by applying an innovative system that meets the requirements of section 1311(k) of this title, the owner or operator of the publicly owned treatment works receiving the treated effluent from such facility may extend the date for compliance with the applicable pretreatment standard established under this section for a period not to exceed 2 years—

(1) if the Administrator determines that the innovative system has the potential for industry-wide application, and

(2) if the Administrator (or the State in consultation with the Administrator, in any case in which the State has a pretreatment program approved by the Administrator)—

(A) determines that the proposed extension will not cause the publicly owned

treatment works to be in violation of its permit under section 1342 of this title or of section 1345 of this title or to contribute to such a violation, and

(B) concurs with the proposed extension.

6. Section 401 of the Clean Water Act, also known as the Federal Water Pollution Control Act, as codified at 33 U.S.C. § 1341, provides:

§ 1341. Certification

(a) Compliance with applicable requirements; application; procedures; license suspension

(1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable water at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title. In the case of any such activity for which there is not an applicable effluent limitation or other limitation under section 1311(b) and 1312 of this title, and there is not an applicable standard under sections 1316 and 1317 of this title, the State shall so certify, except that any such certification shall not be deemed to satisfy section 1371(c) of this title. Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures

for public hearings in connection with specific applications. In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator. If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.

(2) Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirements in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any

such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

(3) The certification obtained pursuant to paragraph (1) of this subsection with respect to the construction of any facility shall fulfill the requirements of this subsection with respect to certification in connection with any other Federal license or permit required for the operation of such facility unless, after notice to the certifying State, agency, or Administrator, as the case may be, which shall be given by the Federal agency to whom application is made for such operating license or permit, the State, or if appropriate, the interstate agency or the Administrator, notifies such agency within sixty days after receipt of such notice that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying State, or, if appropriate, the interstate agency or the Administrator, with notice of any proposed changes in the construction or operation of the facility with re-

spect to which a construction license or permit has been granted, which changes may result in violation of section 1311, 1312, 1313, 1316, or 1317 of this title.

(4) Prior to the initial operation of any federally licensed or permitted facility or activity which may result in any discharge into the navigable waters and with respect to which a certification has been obtained pursuant to paragraph (1) of this subsection, which facility or activity is not subject to a Federal operating license or permit, the licensee or permittee shall provide an opportunity for such certifying State, or, if appropriate, the interstate agency or the Administrator to review the manner in which the facility or activity shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated. Upon notification by the certifying State, or if appropriate, the interstate agency or the Administrator that the operation of any such federally licensed or permitted facility or activity will violate applicable effluent limitations or other limitations or other water quality requirements such Federal agency may, after public hearing, suspend such license or permit. If such license or permit is suspended, it shall remain suspended until notification is received from the certifying State, agency, or Administrator, as the case may be, that there is reasonable assurance that such facility or activity will not violate the applicable provisions of section 1311, 1312, 1313, 1316, or 1317 of this title.

(5) Any Federal license or permit with respect to which a certification has been obtained under paragraph (1) of this subsection may be suspended or revoked by the Federal agency issuing such license or permit upon the entering of a judgment under

this chapter that such facility or activity has been operated in violation of the applicable provisions of section 1311, 1312, 1313, 1316, or 1317 of this title.

(6) Except with respect to a permit issued under section 1342 of this title, in any case where actual construction of a facility has been lawfully commenced prior to April 3, 1970, no certification shall be required under this subsection for a license or permit issued after April 3, 1970, to operate such facility, except that any such license or permit issued without certification shall terminate April 3, 1973, unless prior to such termination date the person having such license or permit submits to the Federal agency which issued such license or permit a certification and otherwise meets the requirements of this section.

(b) Compliance with other provisions of law setting applicable water quality requirements

Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements. The Administrator shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable effluent limitations, or other limitations, standards, regulations, or requirements, or water quality criteria, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such limitations, standards, regulations, requirements, or criteria.

(c) Authority of Secretary of the Army to permit use of spoil disposal areas by Federal licensees or permittees

In order to implement the provisions of this section, the Secretary of the Army, acting through the Chief of Engineers, is authorized, if he deems it to be in the public interest, to permit the use of spoil disposal areas under his jurisdiction by Federal licensees or permittees, and to make an appropriate charge for such use. Moneys received from such licensees or permittees shall be deposited in the Treasury as miscellaneous receipts.

(d) Limitations and monitoring requirements of certification

Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 1311 or 1312 of this title, standard of performance under section 1316 of this title, or prohibition, effluent standard, or pretreatment standard under section 1317 of this title, and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.

7. Section 510 of the Clean Water Act, also known as the Federal Water Pollution Control Act, as codified at 33 U.S.C. § 1370, provides:

§ 1370. State authority

Except as expressly provided in this chapter, nothing in this chapter shall (1) preclude or deny the

right of any State or political subdivision thereof or interstate agency to adopt or enforce (A) any standard or limitation respecting discharges of pollutants, or (B) any requirement respecting control or abatement of pollution; except that if an effluent limitation, or other limitation, effluent standard prohibition, pretreatment standard, or standard of performance is in effect under this chapter, such State or political subdivision or interstate agency may not adopt or enforce any effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance which is less stringent than the effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance under this chapter; or (2) be construed as impairing or in any manner affecting any right of jurisdiction of the States with respect to the waters (including boundary waters) of such States.

B. RELEVANT PROVISIONS OF THE FEDERAL POWER ACT

1. Section 4(e) of the Federal Power Act, as codified at 16 U.S.C. § 797(e), provides:

§ 797. General Powers of Commission

The Commission is authorized and empowered—

(e) Issue of licenses for construction, etc., of dams, conduits, reservoirs, etc.

To issue licenses to citizens of the United States, or to any association of such citizens, or to any corporation organized under the laws of the United States or any State thereof, or to any State or municipality for the purpose of constructing, operating, and maintaining dams, water conduits, reservoirs, power houses, transmission lines, or other project

works necessary or convenient for the development and improvement of navigation and for the development, transmission, and utilization of power across, along, from, or in any of the streams or other bodies of water over which Congress has jurisdiction under its authority to regulate commerce with foreign nations and among the several States, or upon any part of the public lands and reservations of the United States (including the Territories), or for the purpose of utilizing the surplus water or water power from any Government dam, except as herein provided: *Provided*, That licenses shall be issued within any reservation only after a finding by the Commission that the license will not interfere or be inconsistent with the purpose for which such reservation was created or acquired, and shall be subject to and contain such conditions as the Secretary of the department under whose supervision such reservation falls shall deem necessary for the adequate protection and utilization of such reservations: *Provided further*, That no license affecting the navigable capacity of any navigable waters of the United States shall be issued until the plans of the dam or other structures affecting the navigation have been approved by the Chief of Engineers and the Secretary of the Army. Whenever the contemplated improvement is, in the judgment of the Commission, desirable and justified in the public interest for the purpose of improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, a finding to that effect shall be made by the Commission and shall become a part of the records of the Commission: *Provided further*, That in case the Commission shall find that any Government dam may be advantageously used by the United States for public purposes in addition to navigation, no license therefor shall be issued until two years after it shall have reported to Congress the facts

and conditions relating thereto, except that this provision shall not apply to any Government dam constructed prior to June 10, 1920: *And provided further*, That upon the filing of any application for a license which has not been preceded by a preliminary permit under subsection (f) of this section, notice shall be given and published as required by the proviso of said subsection. In deciding whether to issue any license under this subchapter for any project, the Commission, in addition to the power and development purposes for which licenses are issued, shall give equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality.

2. Section 10(a)(1) of the Federal Power Act, as codified at 16 U.S.C. § 803(a)(1), provides:

§ 803. Conditions of license generally

All licenses issued under this subchapter shall be on the following conditions:

(a) Modification of plans; factors considered to secure adaptability of project; recommendations for proposed terms and conditions

(1) That the project adopted, including the maps, plans, and specifications, shall be such as in the judgment of the Commission will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, for the adequate protection, mitigation, and enhancement of

fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses, including irrigation, flood control, water supply, and recreational and other purposes referred to in section 797(e) of this title² if necessary in order to secure such plan the Commission shall have authority to require the modification of any project and of the plans and specifications of the project works before approval.

3. Section 10(j) of the Federal Power Act, as codified at 16 U.S.C. § 803(j), provides:

(j) Fish and wildlife protection, mitigation and enhancement; consideration of recommendations; findings

(1) That in order to adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat) affected by the development, operation, and management of the project, each license issued under this subchapter shall include conditions for such protection, mitigation, and enhancement. Subject to paragraph (2), such conditions shall be based on recommendations received pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) from the National Marine Fisheries Service, the United States Fish and Wildlife Service, and State fish and wildlife agencies.

(2) Whenever the Commission believes that any recommendation referred to in paragraph (1) may be inconsistent with the purposes and requirements of this subchapter or other applicable law, the Commission and the agencies referred to in paragraph (1) shall attempt to resolve any such inconsistency, giving due weight to the recommendations, expertise, and statutory responsibilities of such agencies. If,

² So in original. Probably should be followed by “; and”.

after such attempt, the Commission does not adopt in whole or in part a recommendation of any such agency, the Commission shall publish each of the following findings (together with a statement of the basis for each of the findings):

(A) A finding that adoption of such recommendation is inconsistent with the purposes and requirements of this subchapter or with other applicable provisions of law.

(B) A finding that the conditions selected by the Commission comply with the requirements of paragraph (1).

Subsection (i) of this section shall not apply to the conditions required under this subsection.

4. Section 15(a)(2)-(3) of the Federal Power Act, as codified at 16 U.S.C. § 808(a)(2)-(3), provides:

§ 808. New licenses and renewals

(a) Relicensing procedures; terms and conditions; issuance to applicant with proposal best adapted to serve public interest; factors considered

(2) Any new license issued under this section shall be issued to the applicant having the final proposal which the Commission determines is best adapted to serve the public interest, except that in making this determination the Commission shall ensure that insignificant differences with regard to subparagraphs (A) through (G) of this paragraph between competing applications are not determinative and shall not result in the transfer of a project. In making a determination under this section (whether or not more than one application is submitted for the project), the Commission shall, in addition to the requirements of section 803 of this title, consider (and explain such consideration in writing) each of the following:

(A) The plans and abilities of the applicant to comply with (i) the articles, terms, and conditions of any license issued to it and (ii) other applicable provisions of this subchapter.

(B) The plans of the applicant to manage, operate, and maintain the project safely.

(C) The plans and abilities of the applicant to operate and maintain the project in a manner most likely to provide efficient and reliable electric service.

(D) The need of the applicant over the short and long term for the electricity generated by the project or projects to serve its customers, including, among other relevant considerations, the reasonable costs and reasonable availability of alternative sources of power, taking into consideration conservation and other relevant factors and taking into consideration the effect on the provider (including its customers) of the alternative source of power, the effect on the applicant's operating and load characteristics, the effect on communities served or to be served by the project, and in the case of an applicant using power for the applicant's own industrial facility and related operations, the effect on the operation and efficiency of such facility or related operations, its workers, and the related community. In the case of an applicant that is an Indian tribe applying for a license for a project located on the tribal reservation, a statement of the need of such tribe for electricity generated by the project to foster the purposes of the reservation may be included.

(E) The existing and planned transmission services of the applicant, taking into consideration system reliability, costs, and other applicable economic and technical factors.

(F) Whether the plans of the applicant will be achieved, to the greatest extent possible, in a cost effective manner.

(G) Such other factors as the Commission may deem relevant, except that the terms and conditions in the license for the protection, mitigation, or enhancement of fish and wildlife resources affected by the development, operation, and management of the project shall be determined in accordance with section 803 of this title, and the plans of an applicant concerning fish and wildlife shall not be subject to a comparative evaluation under this subsection.

(3) In the case of an application by the existing licensee, the Commission shall also take into consideration each of the following:

(A) The existing licensee's record of compliance with the terms and conditions of the existing license.

(B) The actions taken by the existing licensee related to the project which affect the public.